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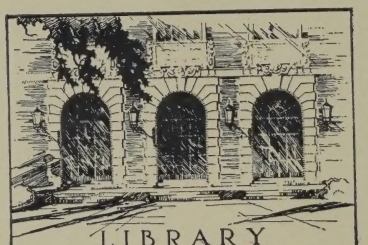

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THE

RUSSIAN ARMY

AND

ITS CAMPAIGNS IN TURKEY

IN

1877-1878.

ATLAS.

BY

F. V. GREENE,

FIRST LIEUTENANT IN THE CORPS OF ENGINEERS, U. S. ARMY, AND LATELY MILITARY ATTACHÉ TO THE UNITED STATES LEGATION AT ST. PETERSBURG.

LONDON:
W. H. ALLEN & CO., 13 WATERLOO PLACE,
PALL MALL, S.W.
PUBLISHERS TO THE INDIA OFFICE.

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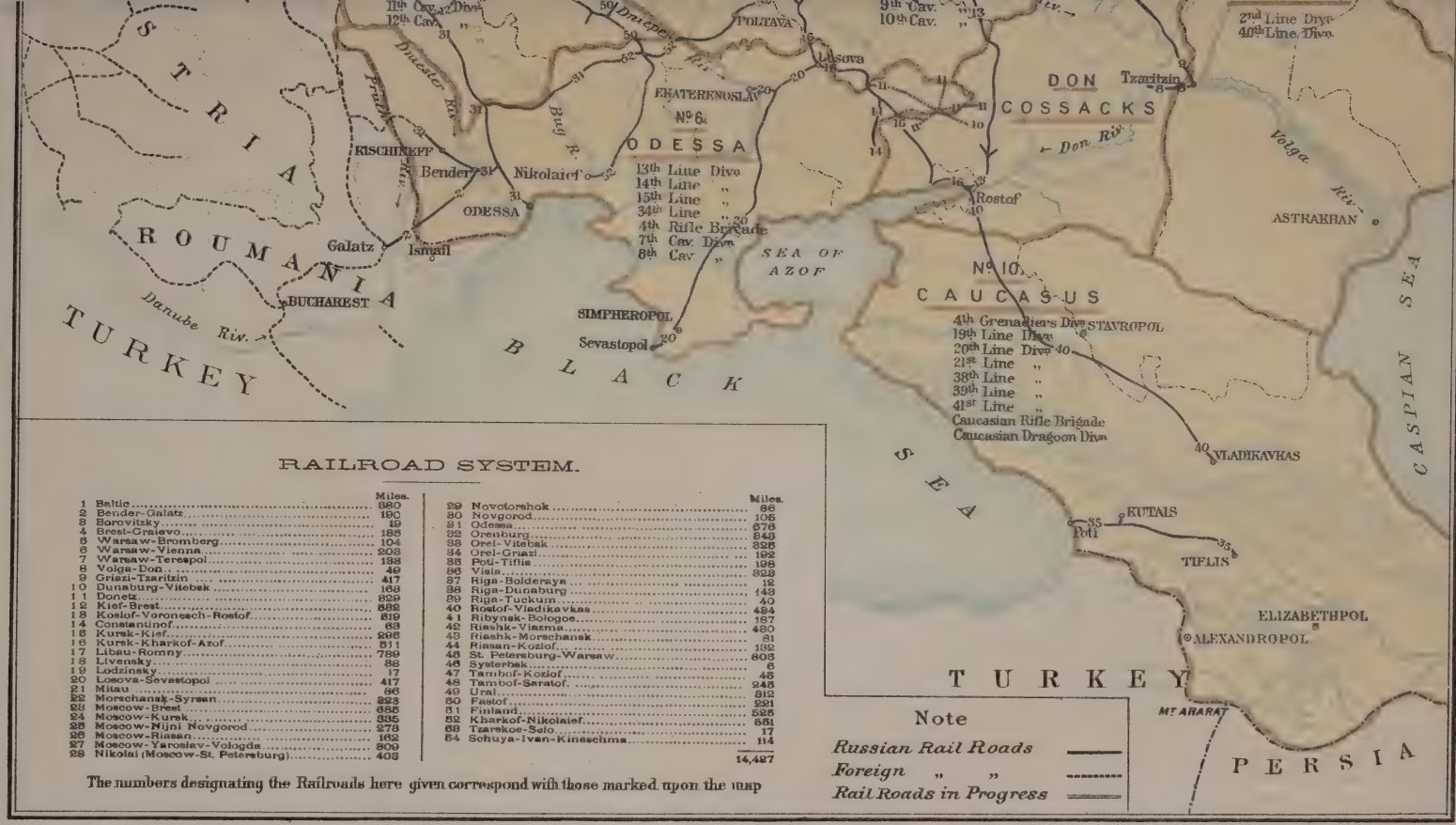
OF THE RUSSIAN EMPIRE.



RAILROAD SYSTEM.

		Miles.
1	Baltic	880
2	Bender-Galatz	190
3	Borovitsky	49
4	Brest-Graievo	188
5	Warsaw-Bromberg	104
6	Warsaw-Vienna	206
7	Warsaw-Terespol	138
8	Volga-Don	49
9	Griazi-Tzaritzin	417
10	Dunaburg-Vitebsk	168
11	Donetz	829
12	Kief-Brest	682
13	Koslof-Voronesch-Rostof	519
14	Constantinof	63
15	Kursk-Kief	298
16	Kursk-Kharkof-Azof	511
17	Libau-Romny	789
18	Livensky	88
19	Lodzinsky	17
20	Losova-Sevastopol	417
21	Mitau	86
22	Morschansk-Syrsan	223
23	Moscow-Brest	635
24	Moscow-Kursk	335
25	Moscow-Nijni Novgorod	273
26	Moscow-Riasan	162
27	Moscow-Yaroslev-Vologda	309
28	Nikolai (Moscow-St. Petersburg)	403
29	Novotorshok	86
30	Novgorod	105
31	Odessa	676
32	Orenburg	843
33	Orel-Vitebsk	325
34	Orel-Griazi	192
35	Poti-Tiflis	196
36	Visla	323
37	Riga-Bolderaya	12
38	Riga-Dunaburg	143
39	Riga-Tuckum	40
40	Rostof-Vladikavkas	434
41	Ribynsk-Bologoe	187
42	Riashk-Viazma	430
43	Riashk-Morschansk	81
44	Riasan-Koziof	132
45	St. Petersburg-Warsaw	803
46	Systerbek	6
47	Tambof-Koziof	45
48	Tambof-Saratof	248
49	Ural	812
50	Fastof	221
51	Finland	525
52	Kharkof-Nikolaief	551
53	Tzarskoe-Selo	17
54	Schuya-Ivan-Kineschma	114
		14,427

The numbers designating the Railroads here given correspond with those marked upon the map

Note

Russian Rail Roads ———

Foreign " " - - - - - -

Rail Roads in Progress ═══

Plate 1.

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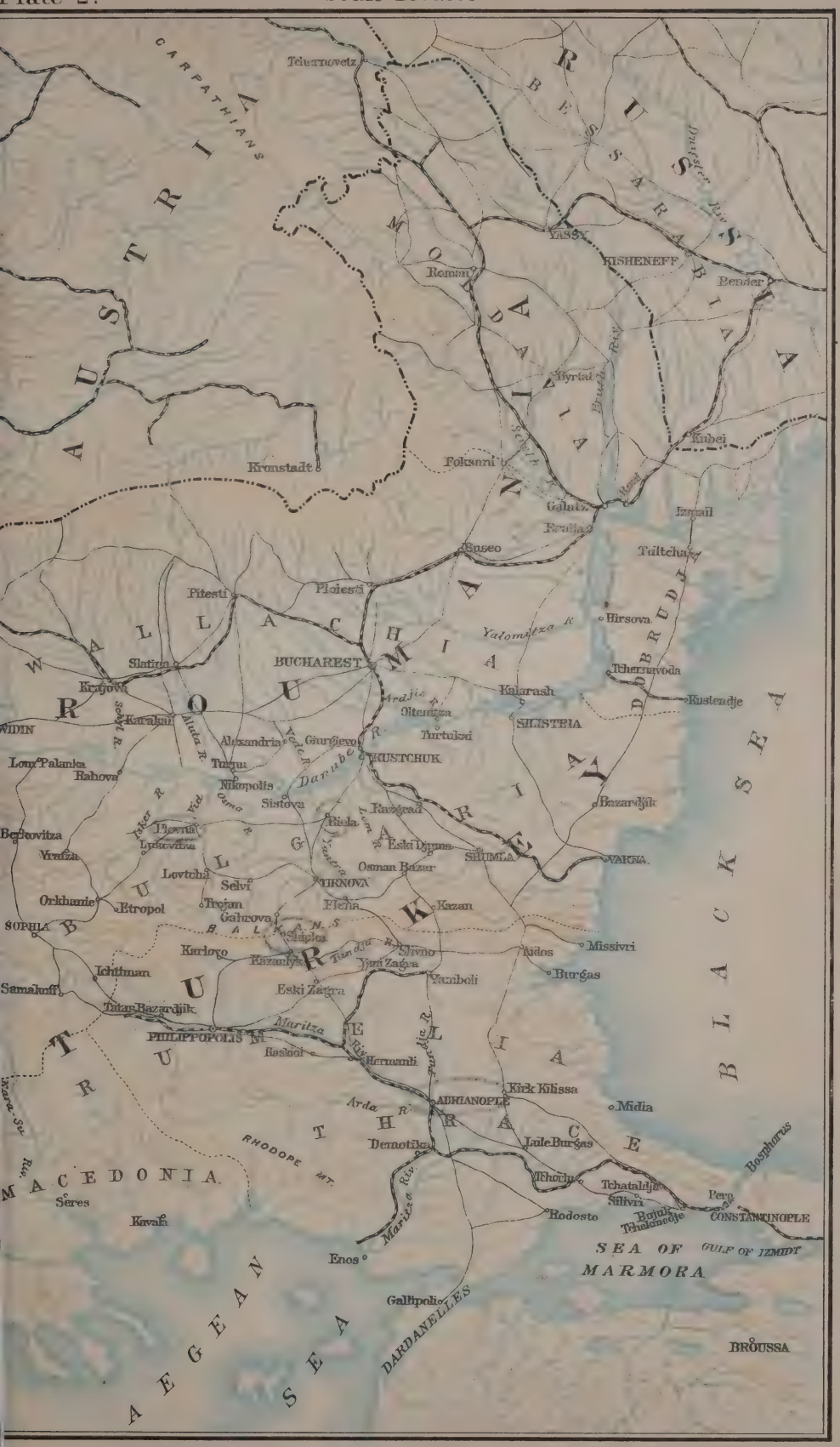
THEATRE OF WAR IN EUROPE

Plate 2.

Scale $\frac{1}{4.500.000}$



50 40 30 20 10 0 50 100 150 250 Miles

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THEATRE OF WAR IN ASIA.

Scale $\frac{1}{4.500.000}$

Plate 3.

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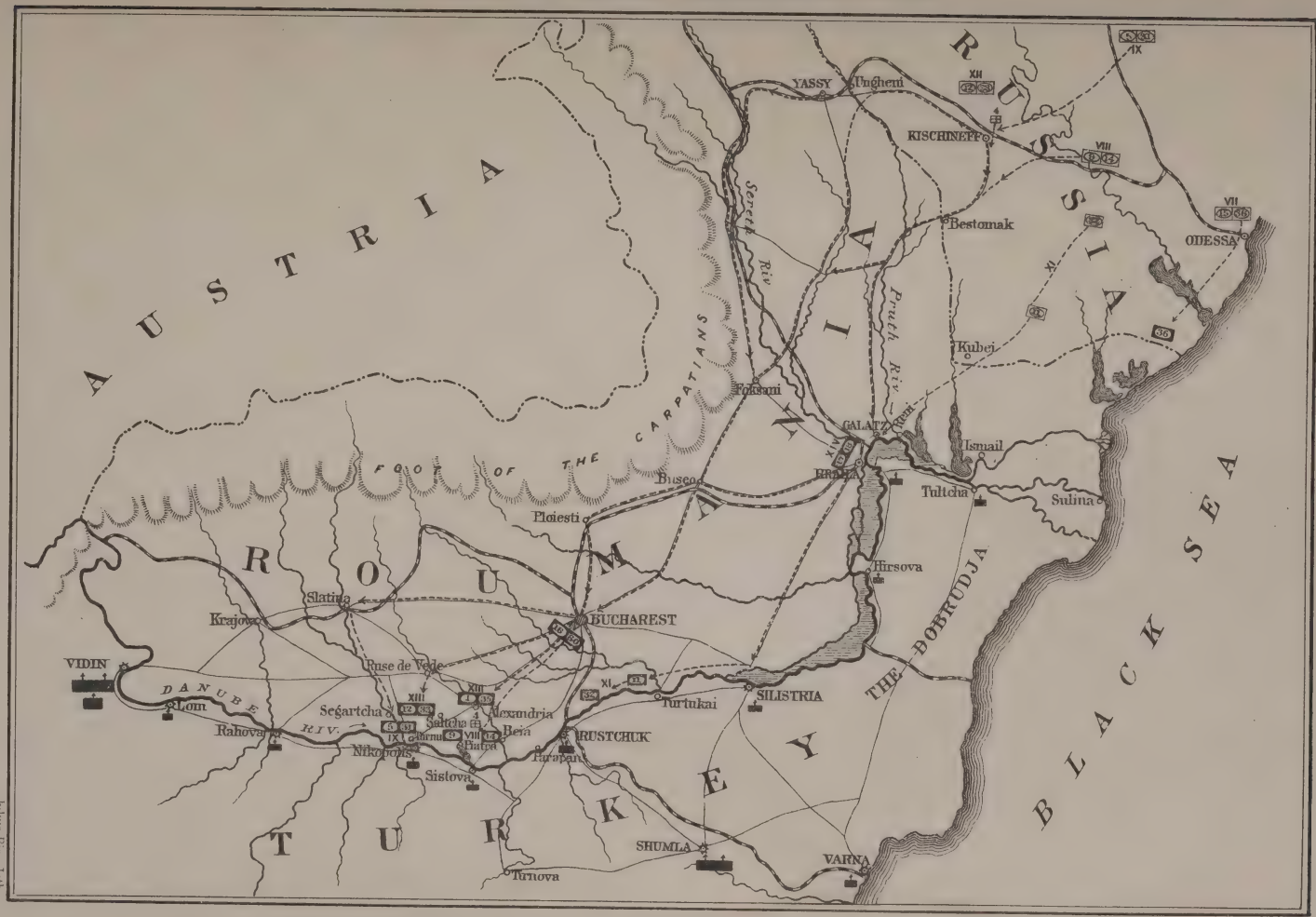
FIGURES MAP N. I.

FIRST PERIOD OF THE CAMPAIGN

From the Declaration of War to the Crossing of the Danube.-April 24th to June 27th 1877.



A Russian Army Corps, consisting of two Infantry Divisions, two Artillery Brigades and one Cavalry Division, is represented thus at commencement of a Period, and thus at its conclusion. The Roman numbers designate the Corps, the Arabic the Infantry Divisions, the Artillery and Cavalry are not shown. The Guard is indicated by letter G in place of Roman numbers. Rifle Brigade thus, Grenadier Divisions thus Turkish Troops are represented thus at beginning of a period and thus at its conclusion.

Plate 4.

Julius Bien Lith

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PROGRESS MAP N. 2.

SECOND PERIOD OF THE CAMPAIGN

From the Crossing of the Danube to the Fall of Plevna, - June 27th to December 10th 1877.

A Russian Army Corps, consisting of two Infantry Divisions, two Artillery Brigades and one Cavalry Division, is represented thus at commencement of a Period, and thus at its conclusion. The Roman numbers designate the Corps, the Arabic the Infantry Divisions, the Artillery and Cavalry are not shown, The Guard is indicated by letter G. in place of Roman numbers. Rifle Brigade thus, Grenadier Divisions thus Turkish Troops are represented thus at beginning of a period and thus at its conclusion.

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Plate 5.

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PROGRESS MAP No. 3.

THIRD PERIOD OF THE CAMPAIGN

From the Fall of Plevna to the conclusion of Peace at San Stefano,—December 10th 1877, to March 3rd 1878.

Plate 6.

A Russian Army Corps, consisting of two Infantry Divisions, two Artillery Brigades and one Cavalry Division, is represented thus at commencement of a Period, and thus at its conclusion. The Roman numbers designate the Corps, the Arabic the Infantry Divisions; the Artillery and Cavalry are not shown, The Guard is indicated by letter G. in place of Roman number. Rifle Brigade thus. Grenadier Divisions thus. Turkish Troops are represented thus at beginning of a period and thus at its conclusion.

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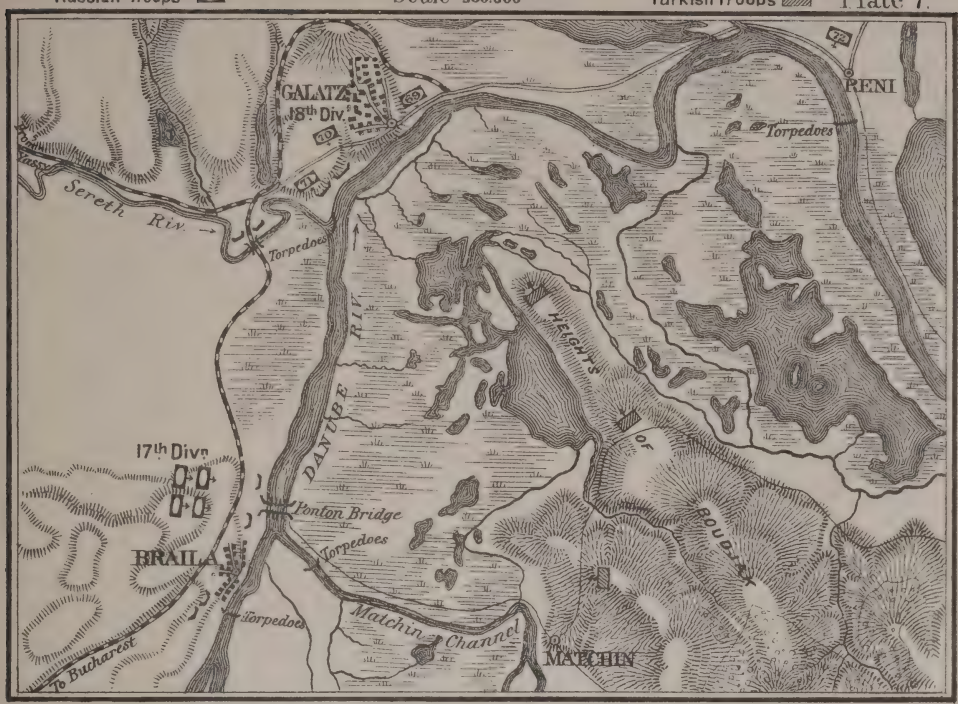
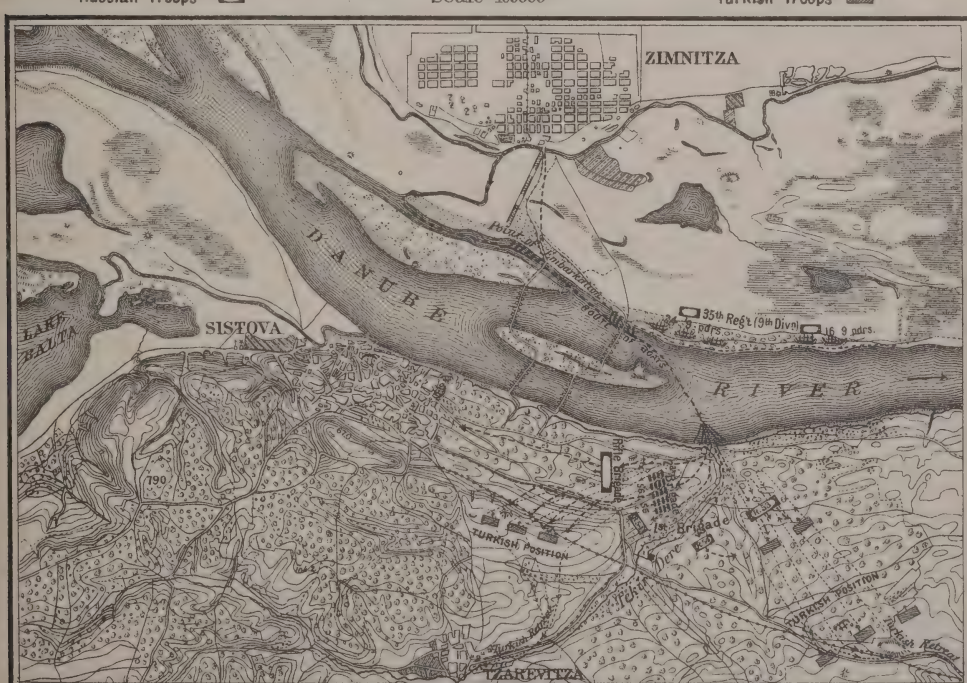
THE CROSSING AT GALATZ

Russian Troops — Scale $\frac{1}{300,000}$ — June 22nd 1877. — Turkish Troops — Plate 7.



THE CROSSING AT ZIMNITZA-SISTOVA

Russian Troops — Scale $\frac{1}{100,000}$ — June 27th 1877. — Turkish Troops



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Contour Lines at 70 ft. vertical interval.
The positions shown are those of about 11 A.M.
The Pontoon Bridges were built during the Month of July.

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MAP OF THE VICINITY OF SISTOVA, NIKOPOLIS AND PLEVNA.

TO ILLUSTRATE THE MOVEMENTS OF THE RUSSIANS IMMEDIATELY AFTER THE PASSAGE OF THE DANUBE

Russian Troops

Scale 1/420.000 — 5 4 3 2 1 0 5 10 15 20 MILES

Turkish Troops

The rectangles shown are those of large Scale Maps Nos 7, 10 & 12.

Julius Bien Lith

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MAP OF THE BALKANS, NEAR SHIPKA PASS.

Scale $\frac{1}{633.600}$

Plate 9

Julius Bien, Lith.

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PLAN OF THE POSITIONS NEAR NIKOPOLIS.

Horizontal Contours at 4 Sagenes (28 F°) vert. distance.

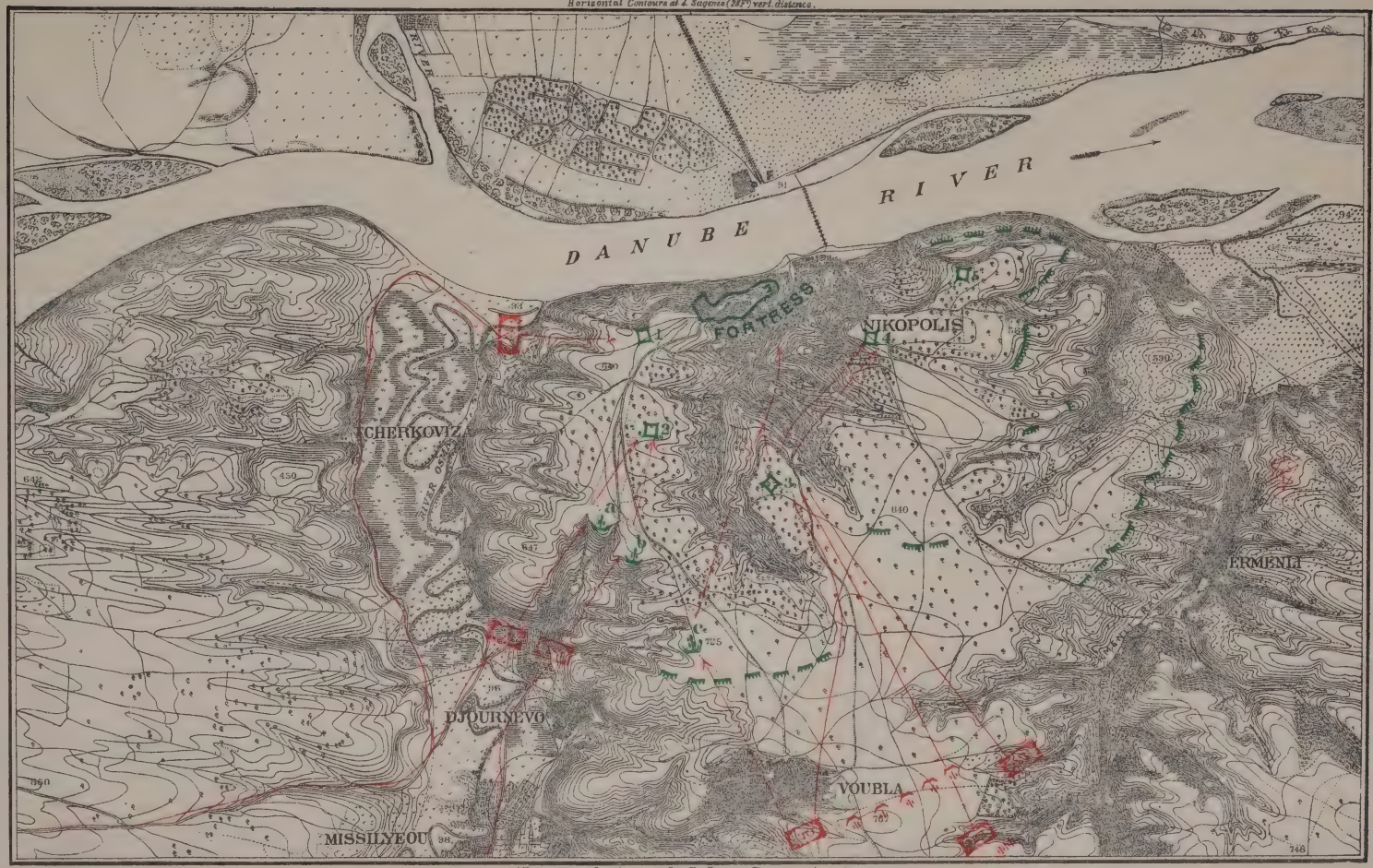

Plate 10.

Julius Bier, Lith.

The pontoon bridge was built by the Roumanians in August

Scale $\frac{1}{84\,000}$

1 ½ 0 1 2 3 4 5 Miles

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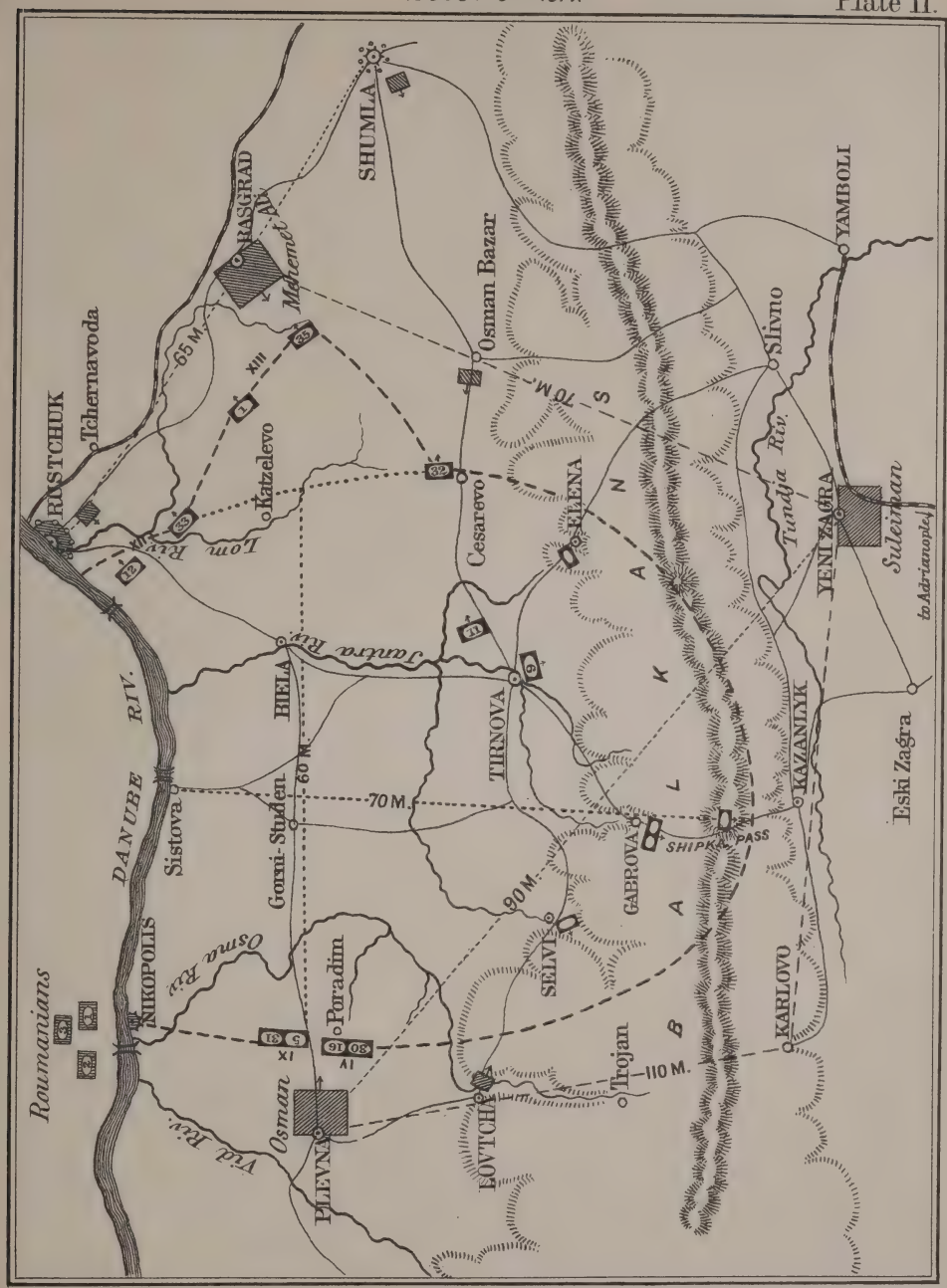
RELATIVE POSITIONS
OF
RUSSIAN & TURKISH ARMIES
AUGUST 5TH 1877.

Plate 11.



Julius Bien, Lith

RUSSIANS

HQ QUARTERS AT GORNI STUDEN.

IX C. } IV C. }	35000	INFY	– in front of PLEVNA
XII C. } XIII C. }	42000	„	– on line of LOM
XI C.	20000	„	– in front of OSMAN BAZAR
VIII C. } 4 R.B. } Bulg. } Legion }	23000	„	at Shipka Pass, GABROVA ELENA SELVI TIRNOVA
	120000		
	35000	Roumanians opposite NIKOPOLIS	

TURKS.

Osman Pasha	50000	INFY	PLEVNA
Suleiman Pasha	40000	„	YENI ZAGRA
Mehemet Ali Pasha	65000	„	RAZGRAD
„ „ „	10000	„	SHUMLA
„ „ „	10000	„	RUSTCHUK
„ „ „	8000	„	OSMAN BAZAR
Adit Pasha	12000	„	LOVTCHA
	195000		

10 5 0 10 20 30 40 50 MILES

Scale $\frac{1}{1.350.000}$

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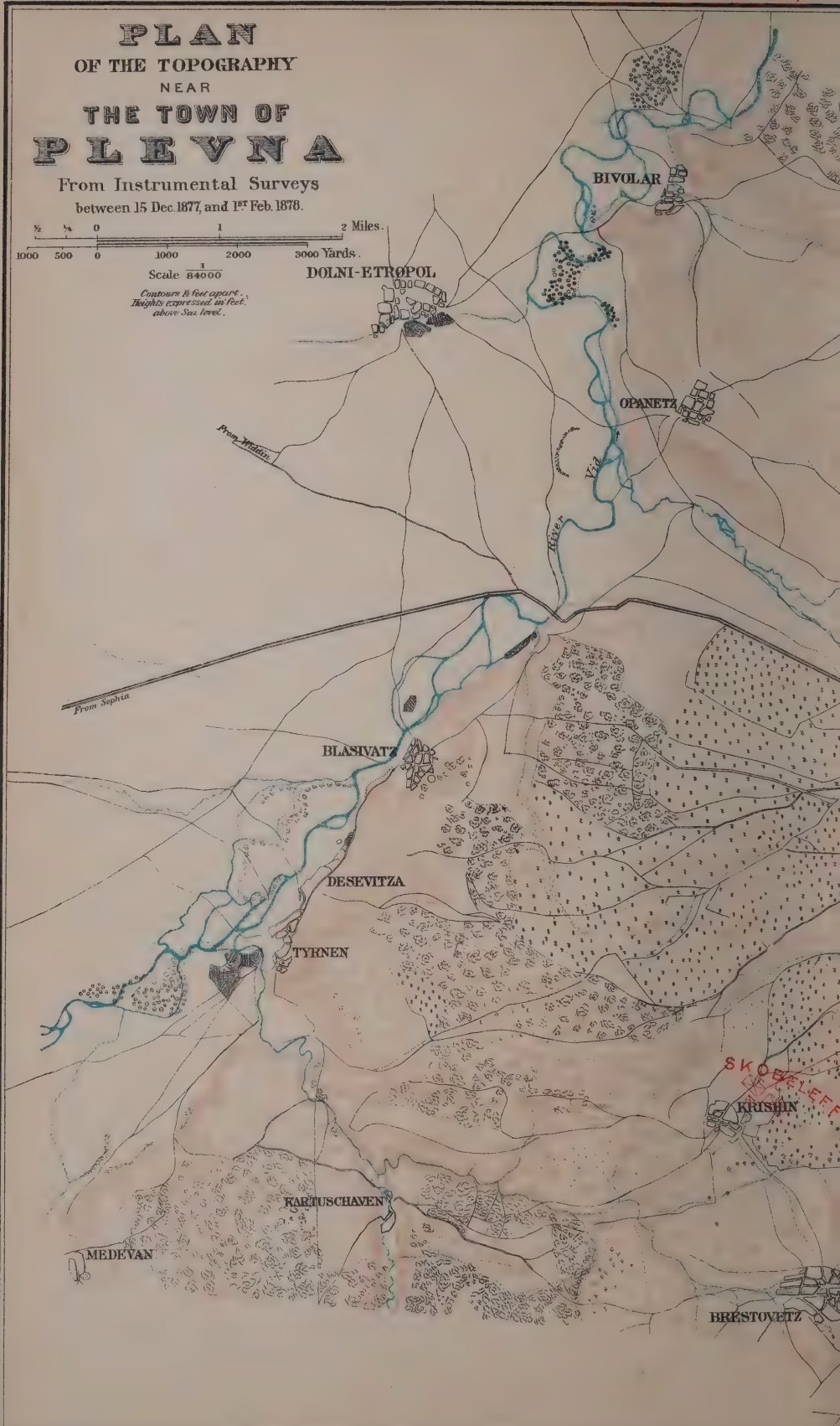
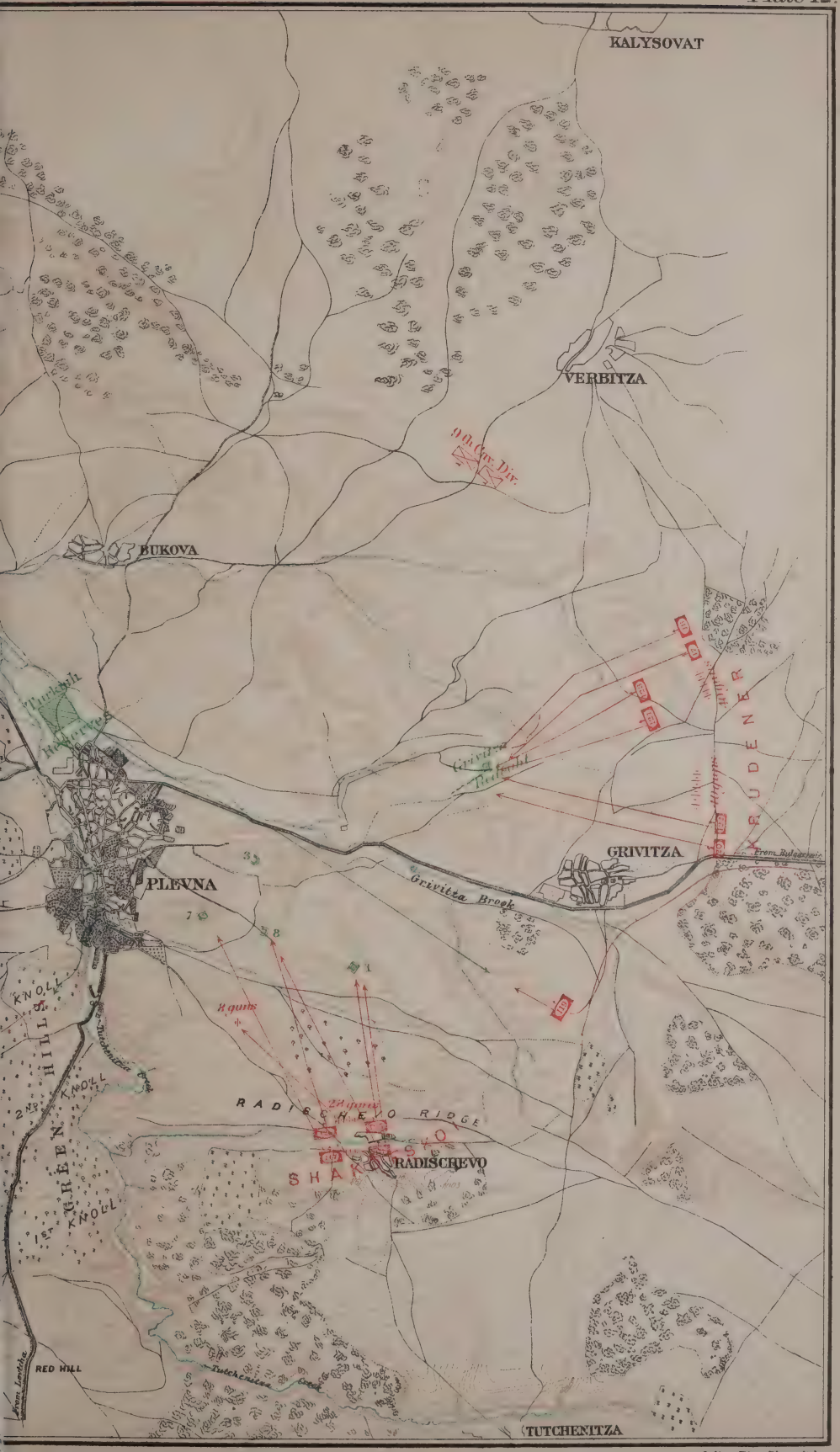
PLEVNA,


PLAN
OF THE TOPOGRAPHY
NEAR
THE TOWN OF
PLEVNA
From Instrumental Surveys
between 15 Dec. 1877, and 1st Feb. 1878.
½ ¼ 0 1 2 Miles.
1000 500 0 1000 2000 3000 Yards.
Scale 1/84000
Contours 16 feet apart.
Heights expressed in feet.
above Sea level.
BIVOLAR
DOLNI-ETROPOL
OPANETZ
From Widdin
Vid
River
From Sophia
BLASIVATZ
DESEVITZA
TYRNEN
KRISHIN
KARTUSCHAVEN
MEDEVAN
BRESTOVETZ



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SHIPKA PASS
AND
VICINITY
Scale 1/42000
Contours at 70 feet.
From Gabrova
Spaset
Baskioi
Stamounetz
Zeleno Drevo
Spring
Hut of Comdg. Genl
4th Position

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Plate 13.

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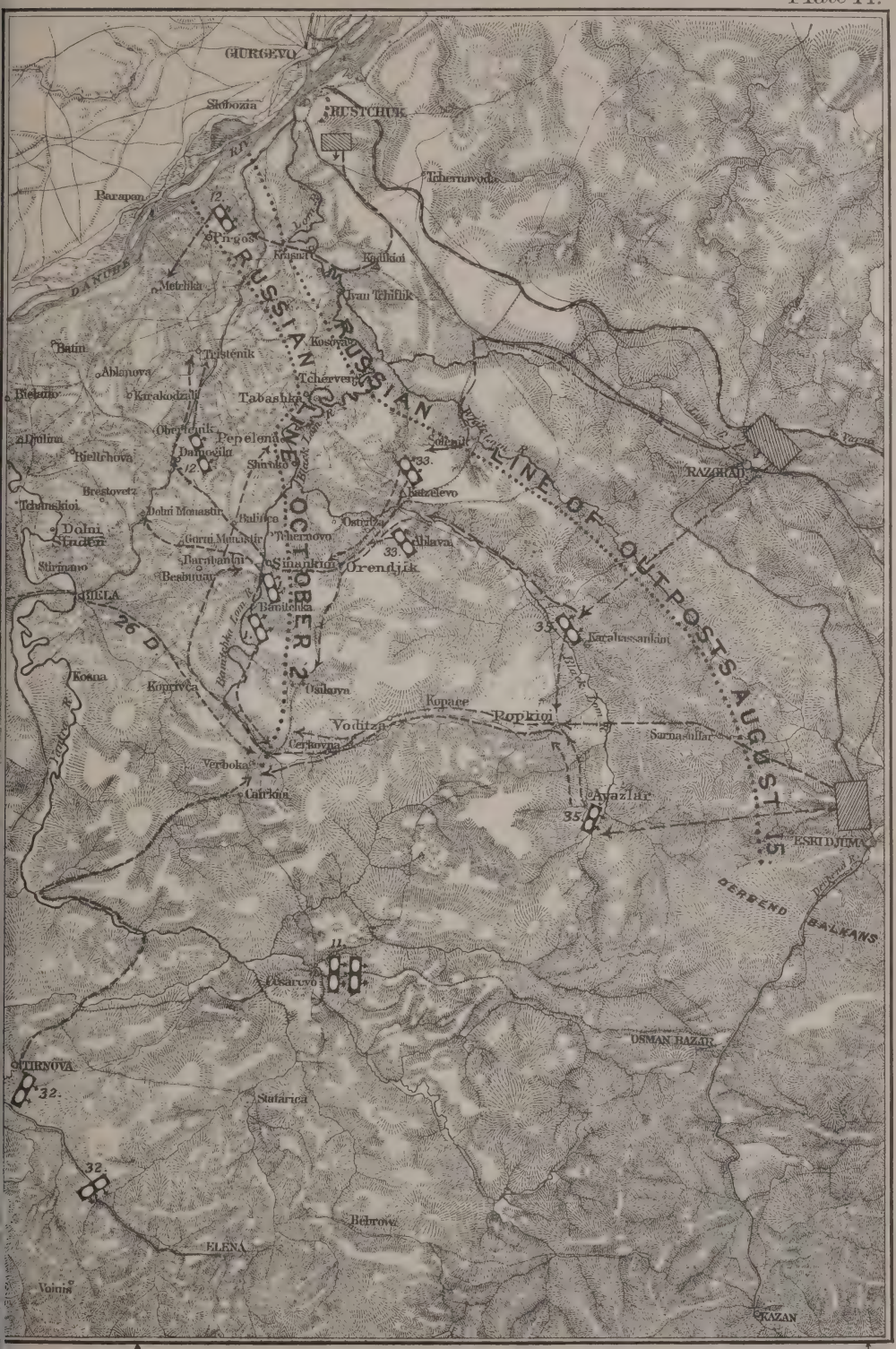
COUNTRY BETWEEN THE LOM & YANTRA RIVERS

Scale $\frac{1}{600.000}$

Plate 14.



Russian Troops

Turkish Troops

5 4 3 2 1 0 5 10 15 20 MILES

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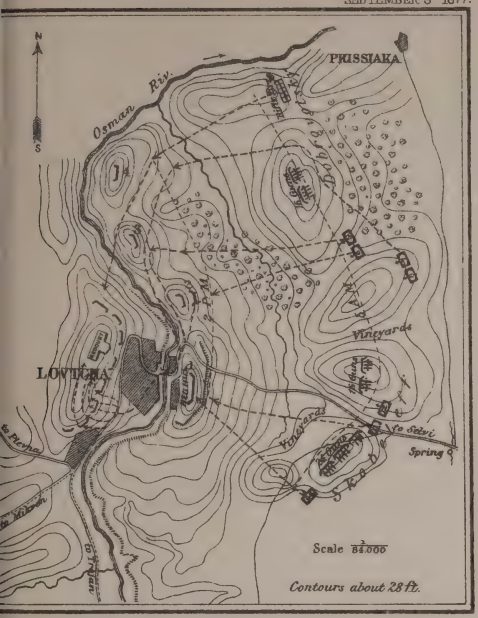
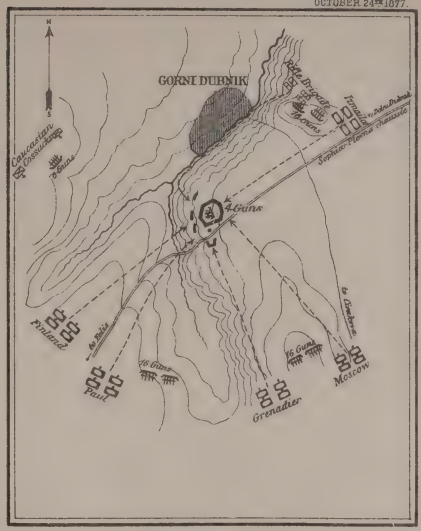
BATTLE OF LOVTCHA

SEPTEMBER 3rd 1877.



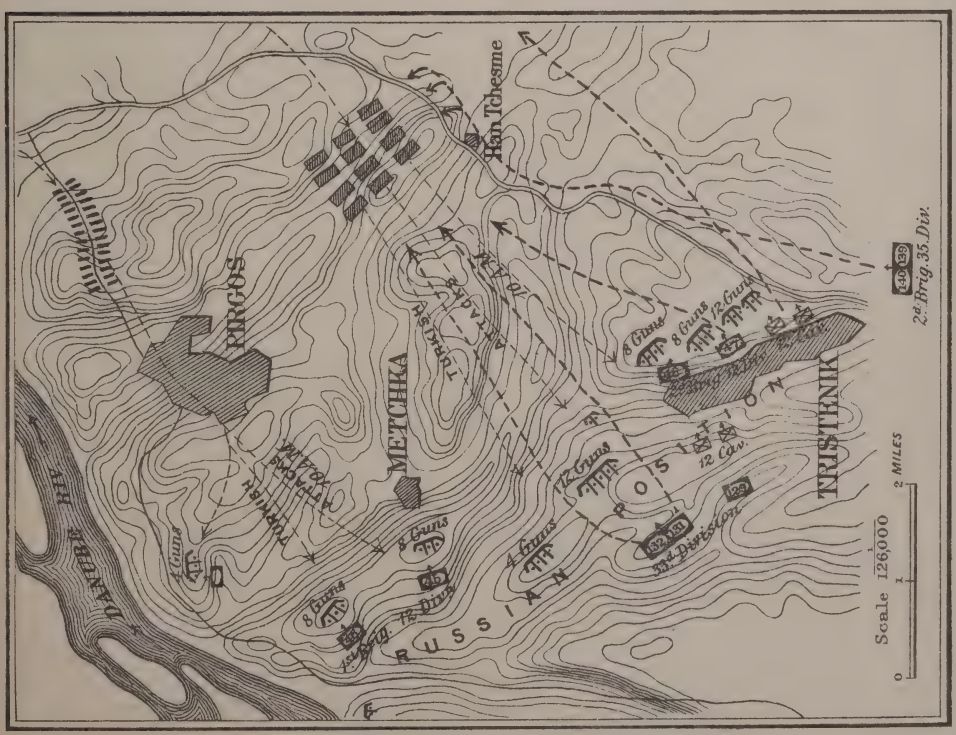
BATTLE OF GORNI DUBNIK.

OCTOBER 24th 1877.



BATTLE OF METCHKA TRISTENIK

DECEMBER 12th 1877.



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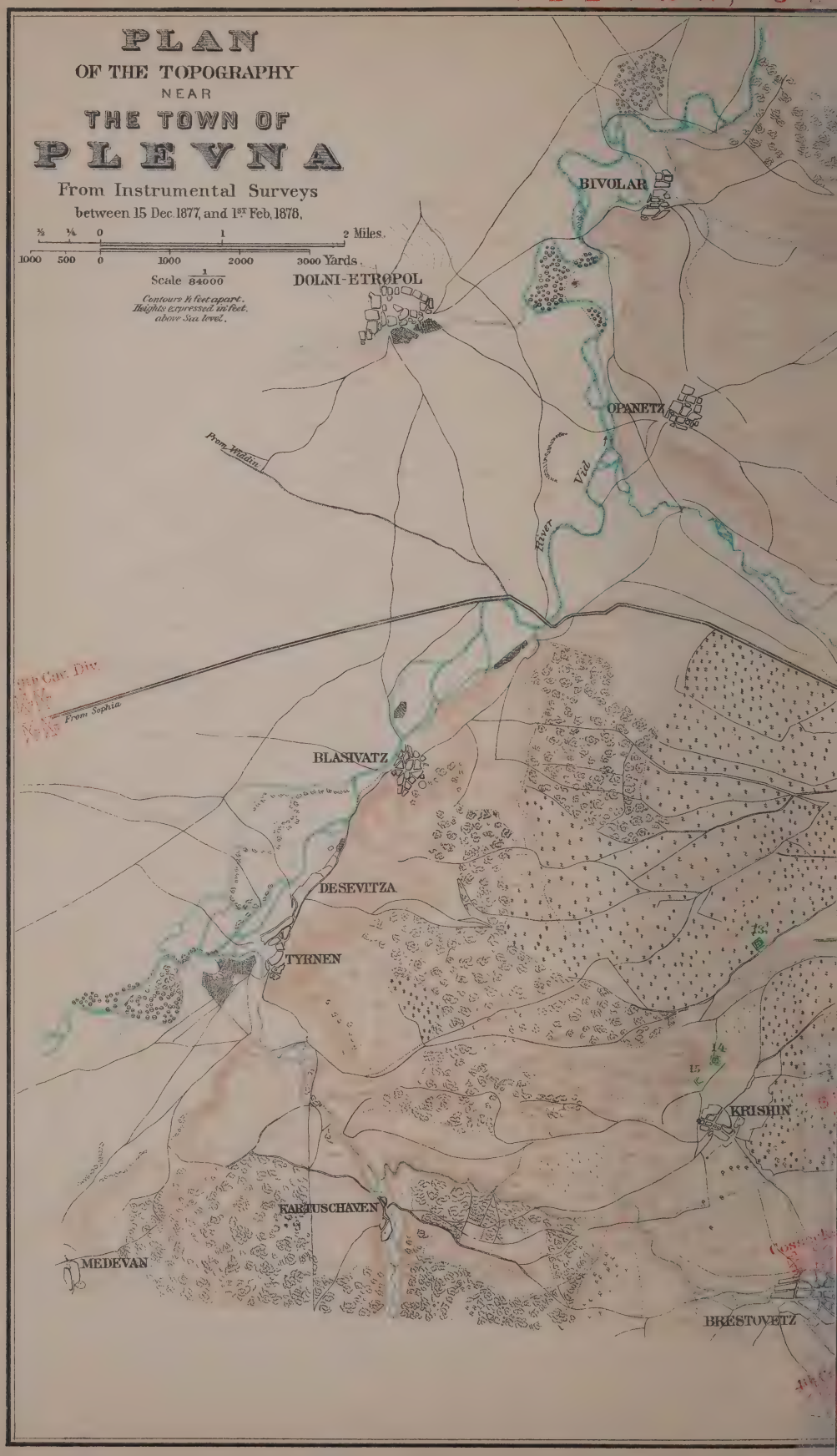
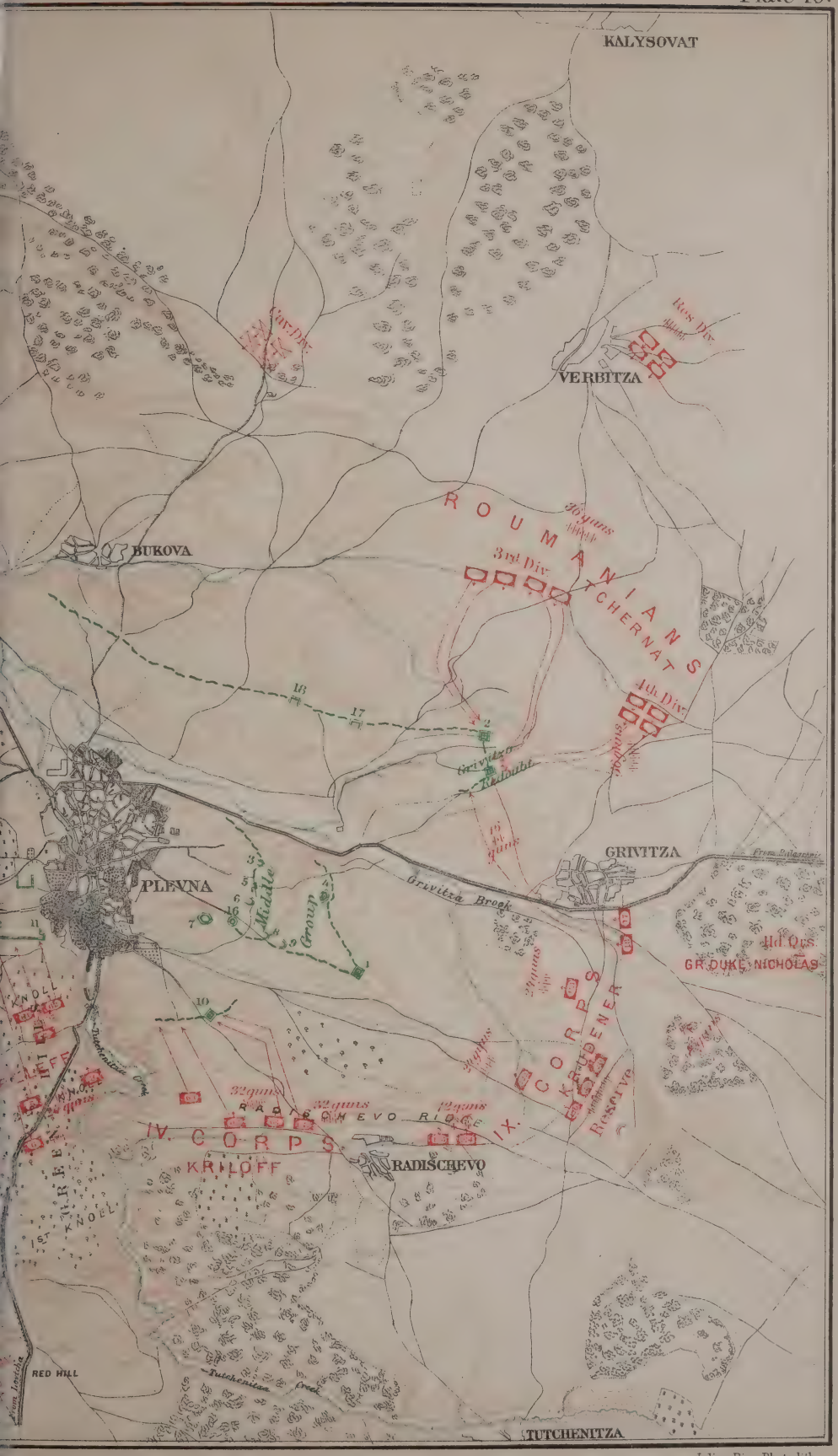
PLEVNA, S


PLAN
OF THE TOPOGRAPHY
NEAR
THE TOWN OF
PLEVNA
From Instrumental Surveys
between 15 Dec. 1877, and 1st Feb. 1878.
½ ¼ 0 1 2 Miles.
1000 500 0 1000 2000 3000 Yards.
Scale 1/84000
Contours 16 feet apart.
Heights expressed in feet above Sea level.
BIVOLAR
DOLNI-ETROPOL
OPANETZ
From Vidin
River Vid
From Sophia
BLASHVATZ
DESEVITZA
TYRNEN
KRISHIN
KARTUSCHAVEN
MEDEVAN
BRESTOVETZ



Julius Bien, Photo-lith.

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INVESTMENT OF PLEVNA.

POSITIONS OF TROOPS NOVEMBER 5TH 1877.

Scale 300 000

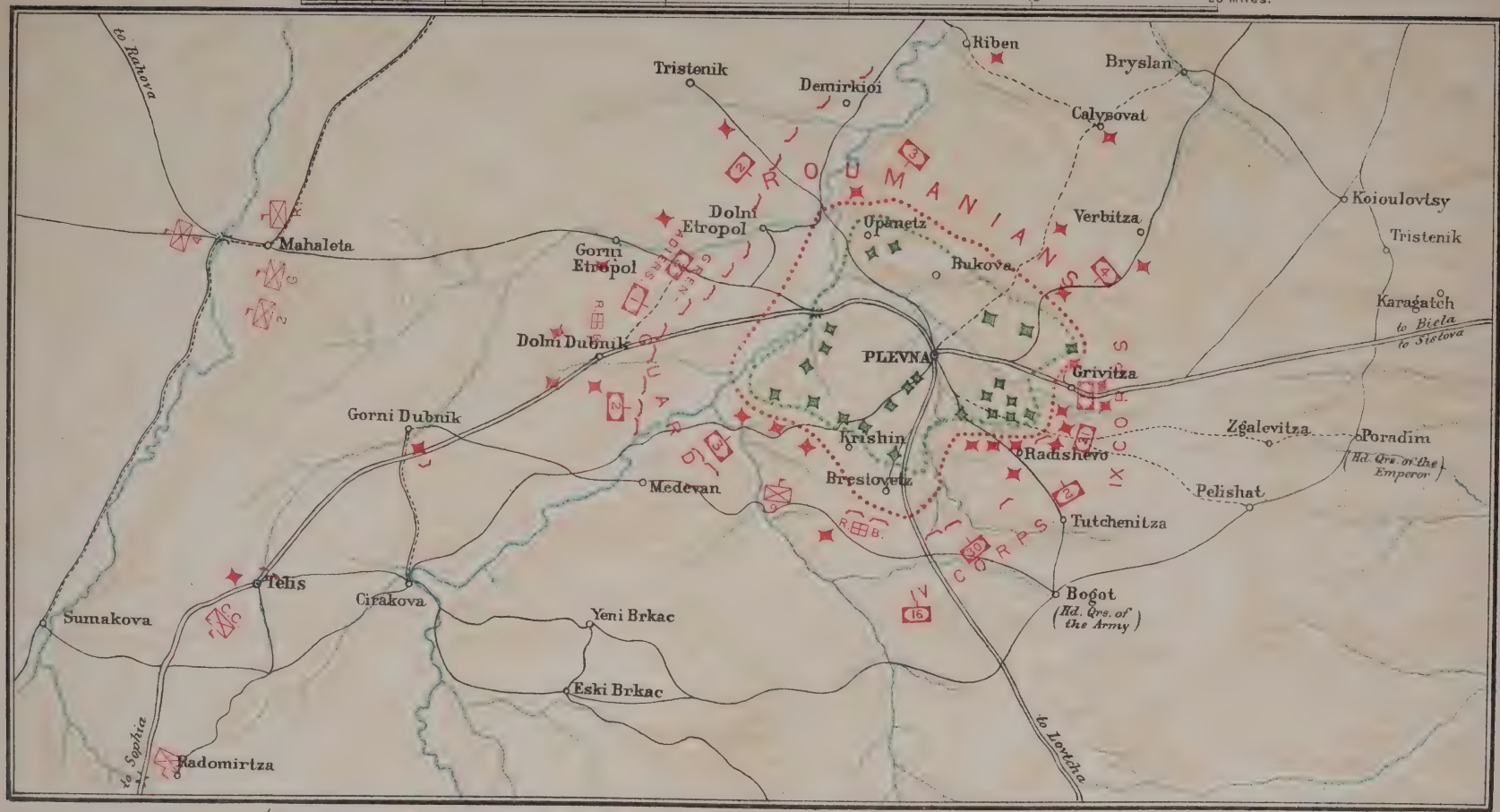

Plate 17.

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PASSAGE OF THE BALKANS NEAR SOPHIA, DEC. 25-31. 1877.

Scale $\frac{1}{420.000}$

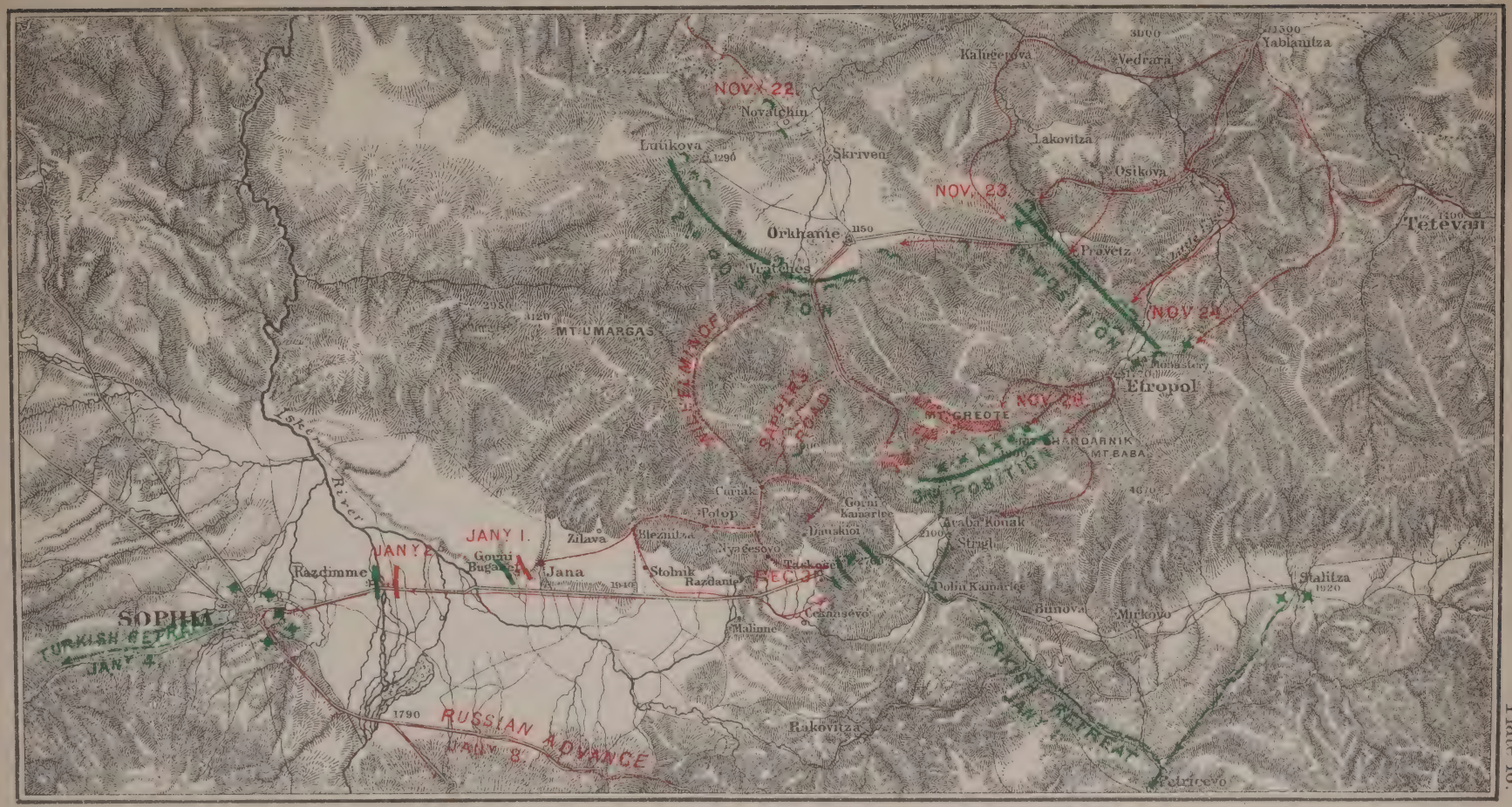

Plate 18.

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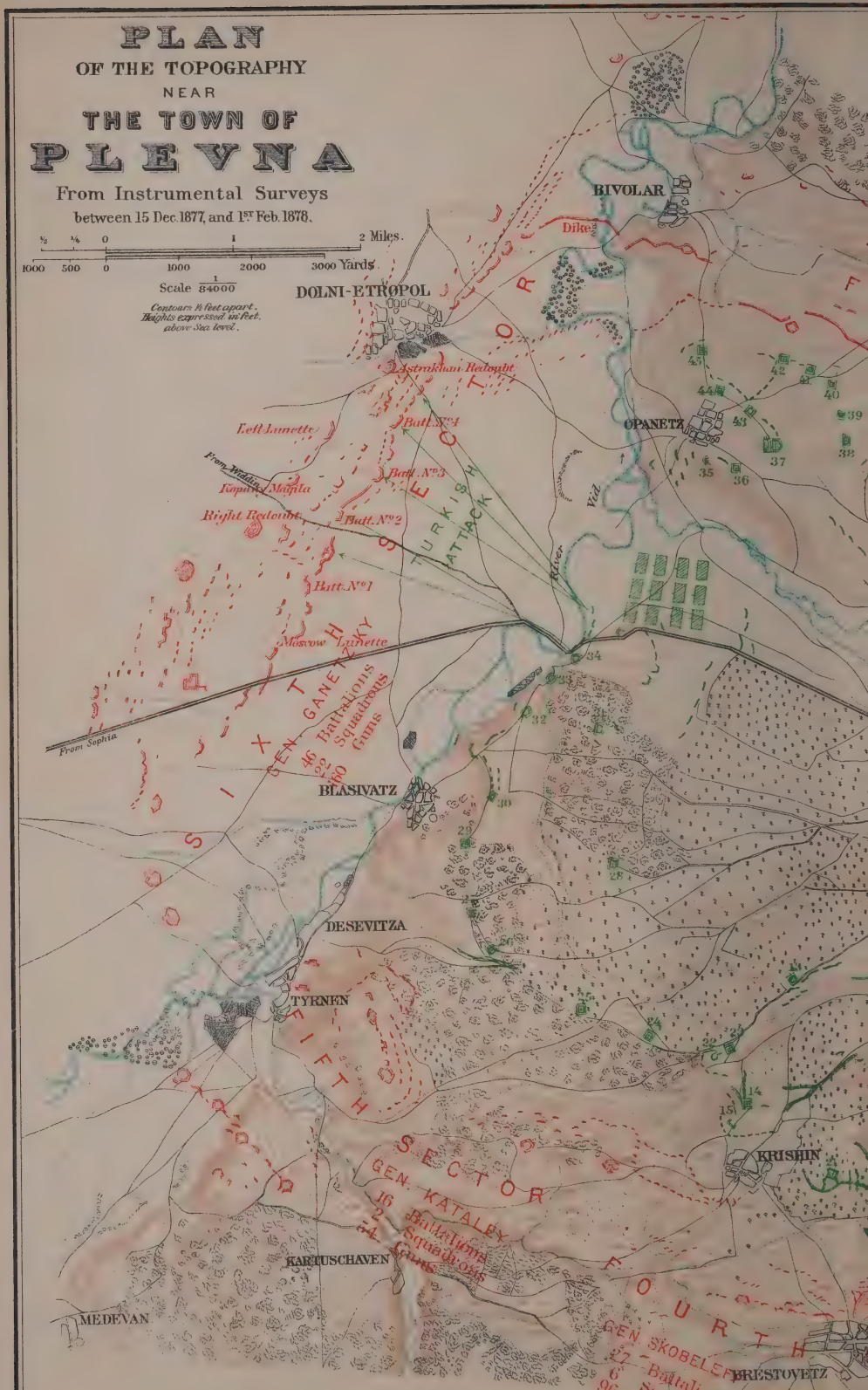
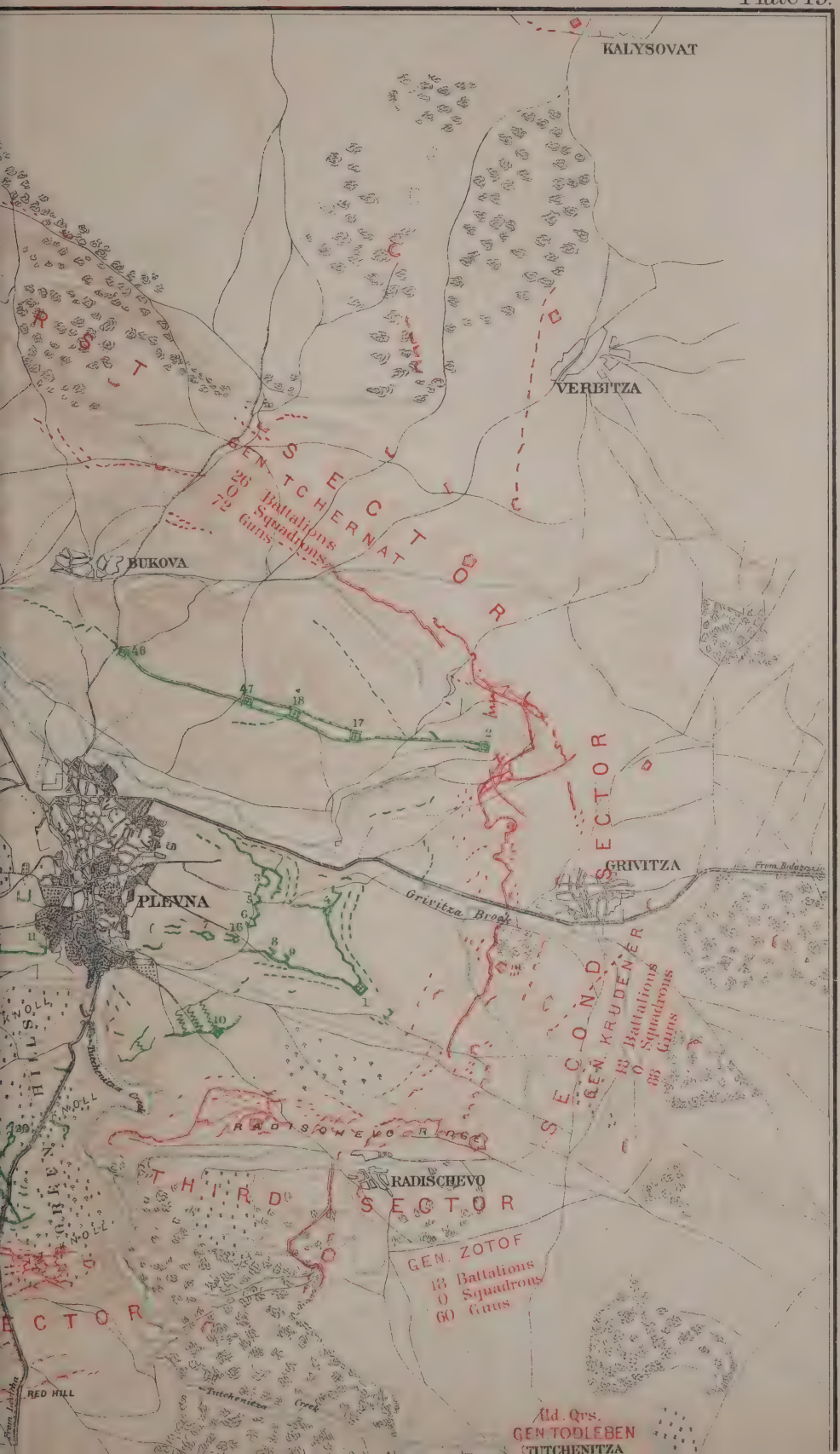

PLAN
OF THE TOPOGRAPHY
NEAR
THE TOWN OF
PLEVNA
From Instrumental Surveys
between 15 Dec. 1877, and 1st Feb. 1878.
½ ¼ 0 1 2 Miles.
1000 500 0 1000 2000 3000 Yards.
Scale 1/84000
Contours 11 feet apart.
Heights expressed in feet above Sea level.
BIVOLAR
Dike
DOLNI-ETROPOL
Astrakhan Redoubt
Left Lunette
Batt. No 4
Batt. No 3
From Widdin
Kopaitz Mujila
Right Redoubt
Batt. No 2
Batt. No 1
Moscow Lunette
From Sophia
OPANETZ
Vid
River
TURKISH ATTACK
SIXTH SECTOR
GEN. GANETZKY
46 Battalions
22 Squadrons
60 Guns
BLASIVATZ
DESEVITZA
TYRNEN
FIFTH SECTOR
GEN. KATALEY
16 Battalions
2 Squadrons
14 Guns
KRISHIN
KARTUSCHAVEN
MEDEVAN
FOURTH
GEN. SKOBELEF
27 Battalions
6 Squadrons
96 Guns
BRESTOVETZ
RUSSIAN, REDOUBTS
BATTERIES
INTRENCHMENTS
SHELTER TRENCHES
TURKISH, REDOUBTS
BATTERIES
INTRENCHMENTS
SHELTER TRENCHES


KALYSOVAT
VERBITZA
BUKOVA
GEN. TCHERNAT
26 Battalions
0 Squadrons
72 Guns
SECTOR
PLEVNA
GRIVITZA
Grivitza Brook
From Bulgarevo
SECOND SECTOR
GEN. KRUDENER
13 Battalions
0 Squadrons
66 Guns
RADISCHEVO
THIRD SECTOR
GEN. ZOTOF
13 Battalions
0 Squadrons
60 Guns
RED HILL
Tutchenitza Creek
Hd. Qrs.
GEN. TODLEBEN
TUTCHENITZA

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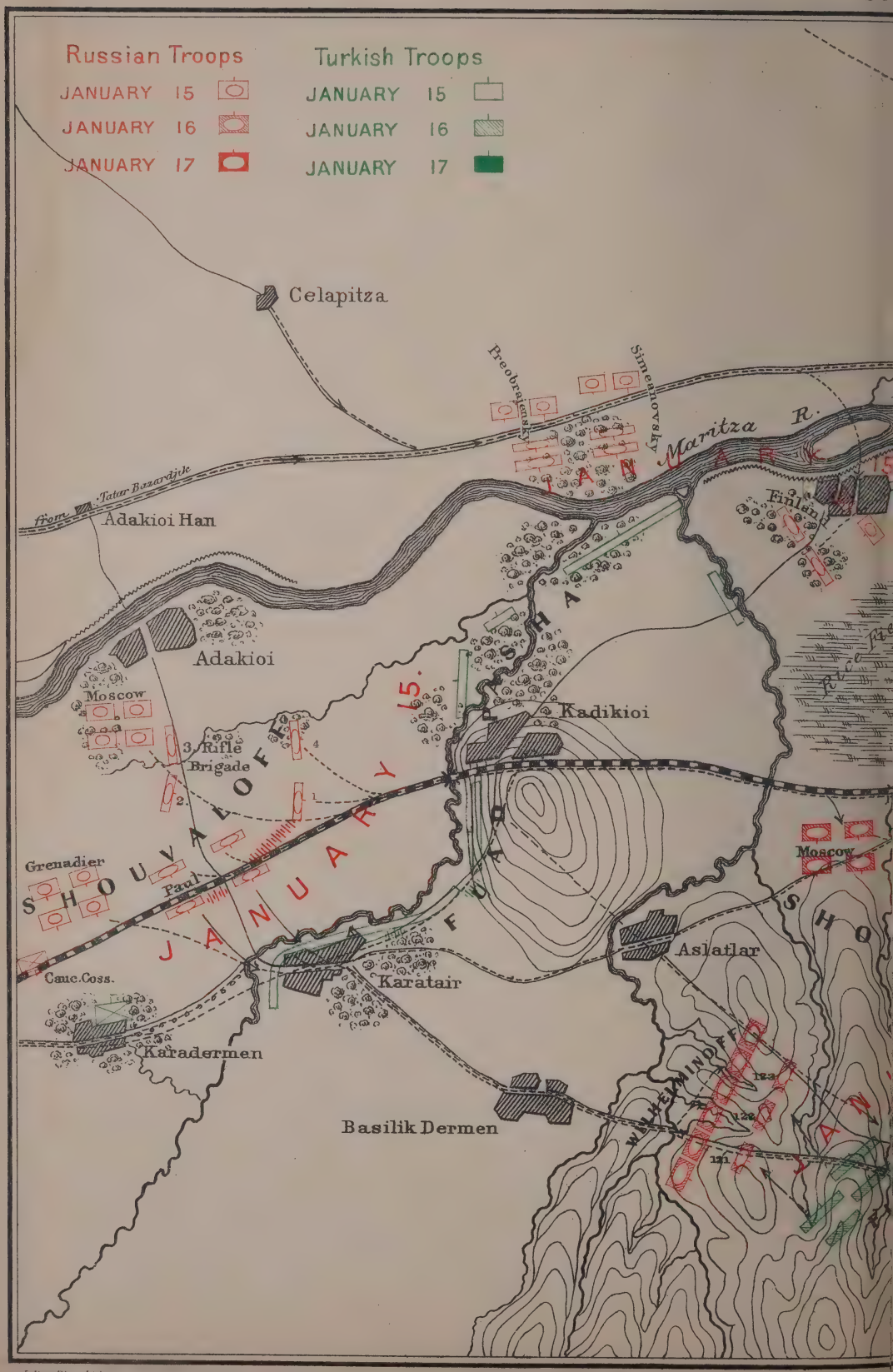
BATTLES NEAR PHILIPPO

Sc

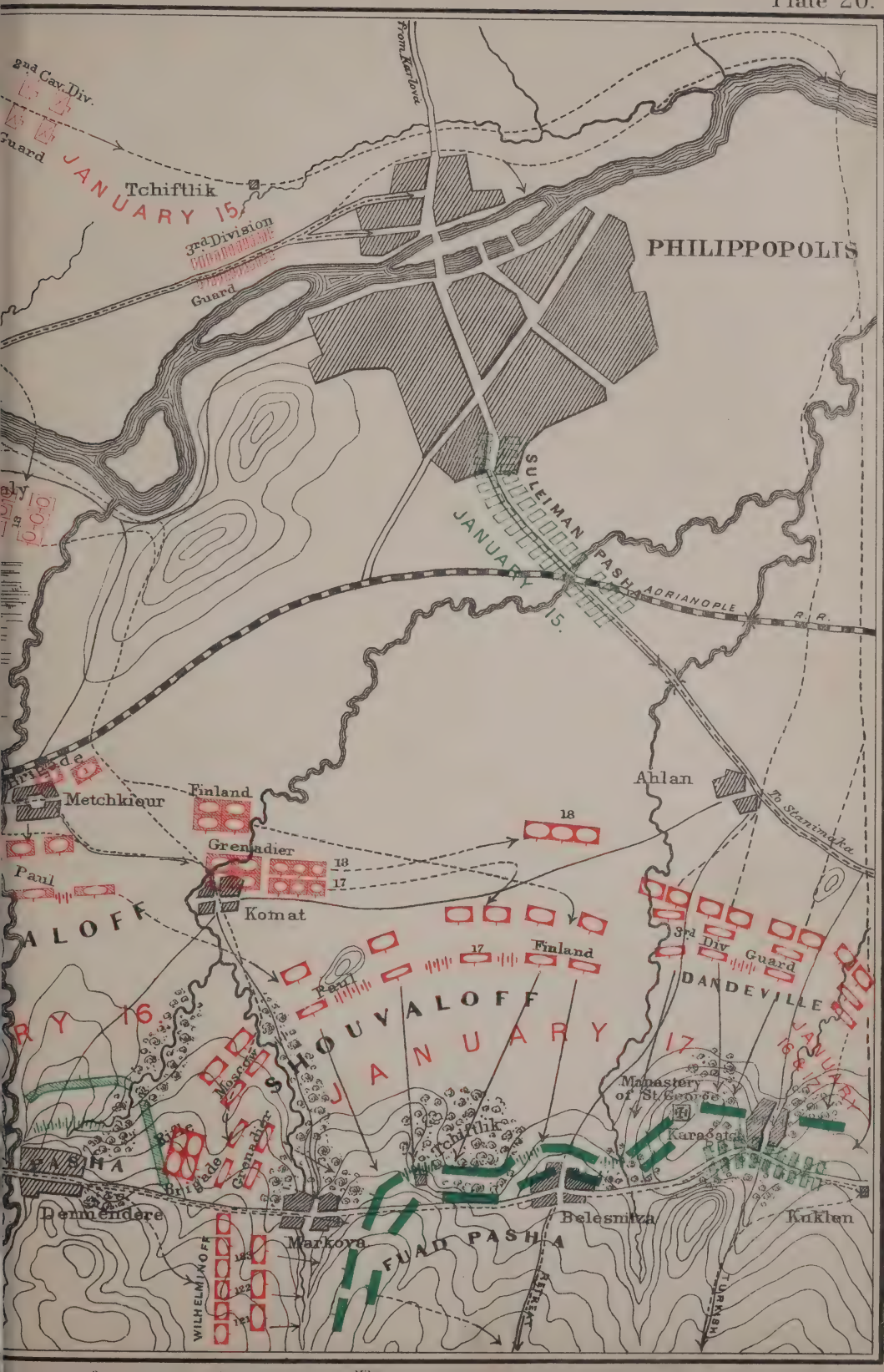


Julius Bien Lith

S, JANUARY 15, 16 AND 17, 1878.

$\frac{1}{84.000}$

Plate 20.



3 4 5 Miles

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MAP OF THE BALKANS, NEAR SHIPKA PASS.

Plate 21

Scale $\frac{1}{633.600}$

Julius Bien Lith

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ASSAULT OF KARS NOV. 17, 1877.

Scale $\frac{1}{420.000}$

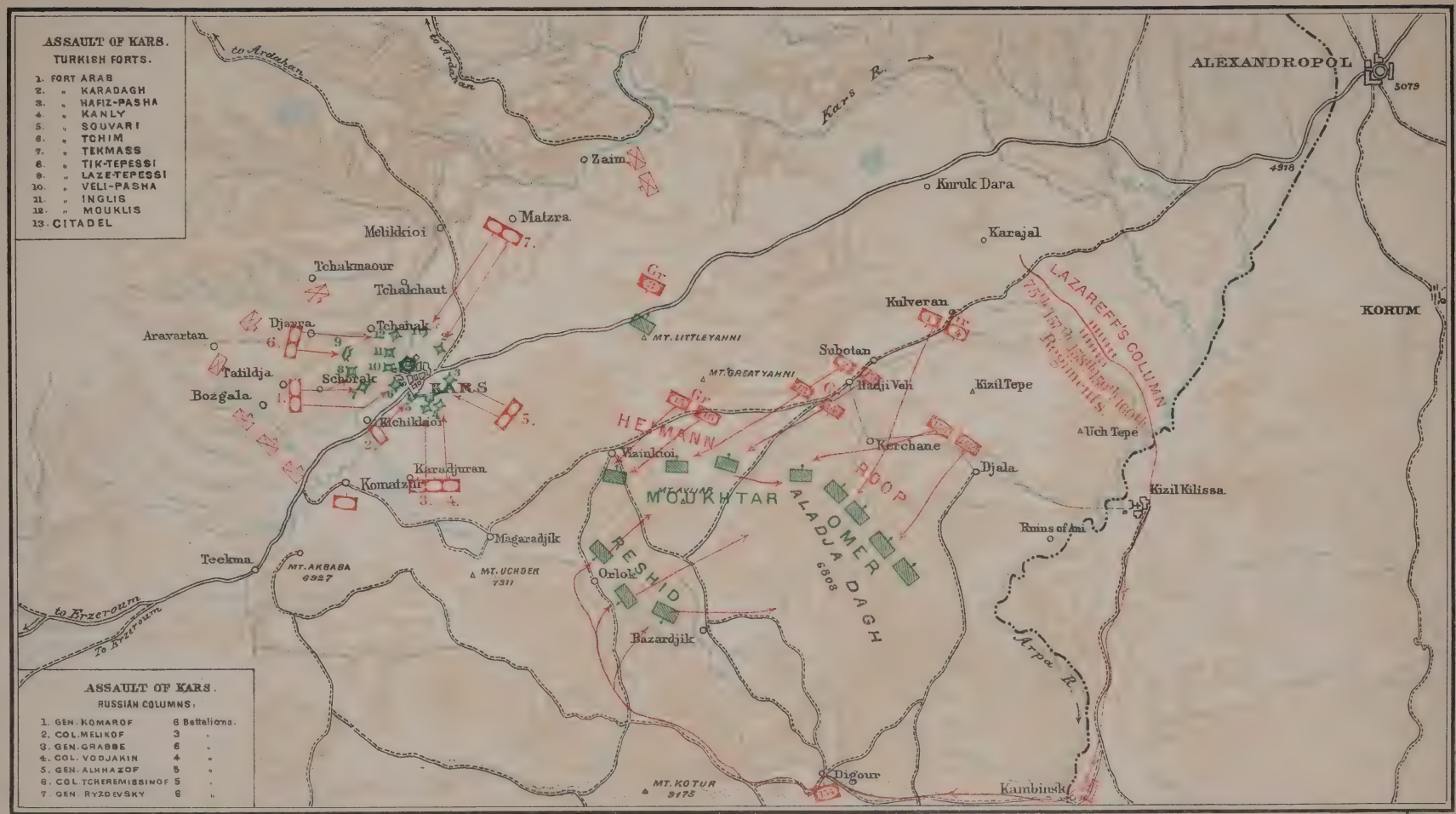

Plate 22.

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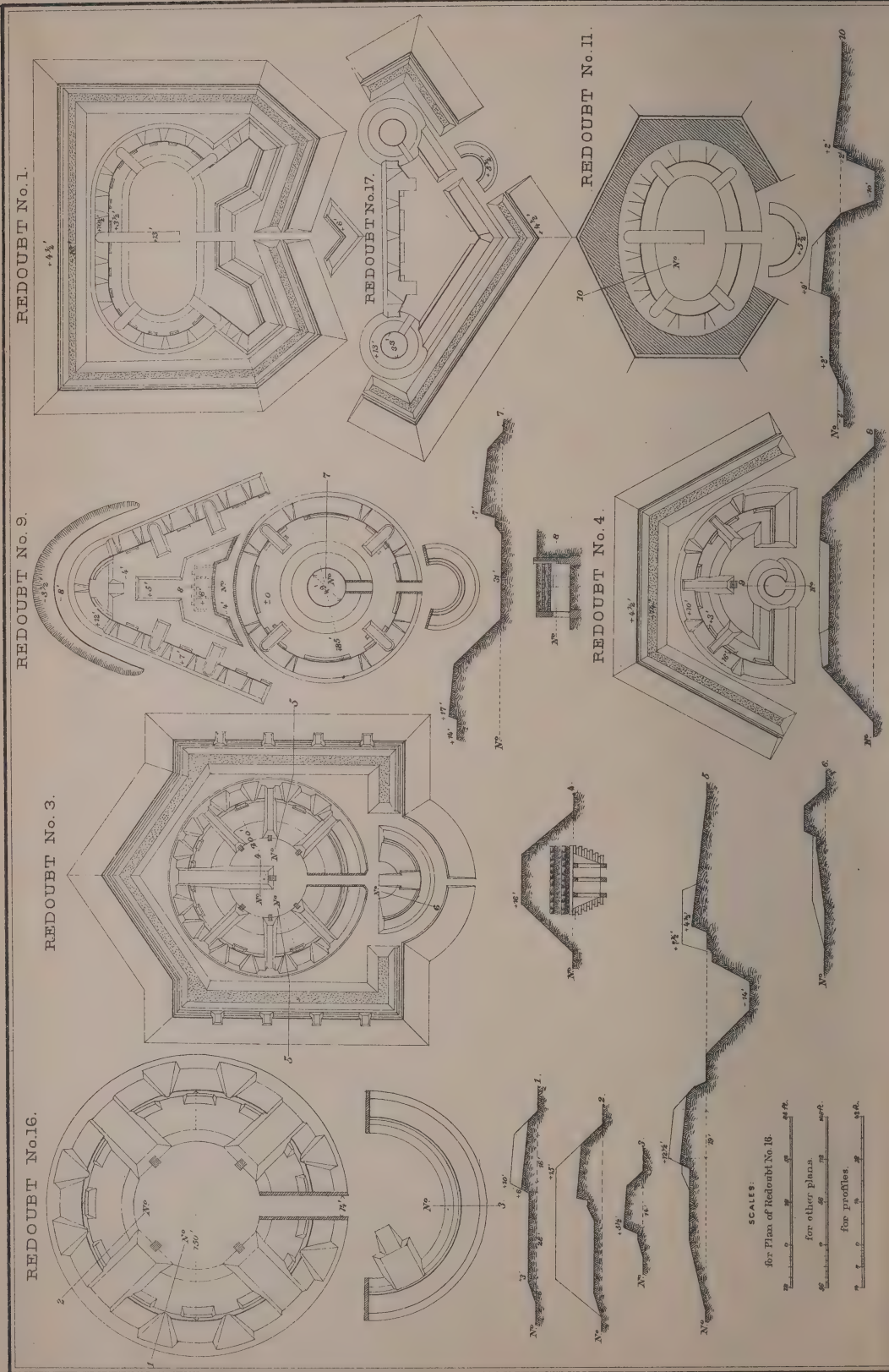
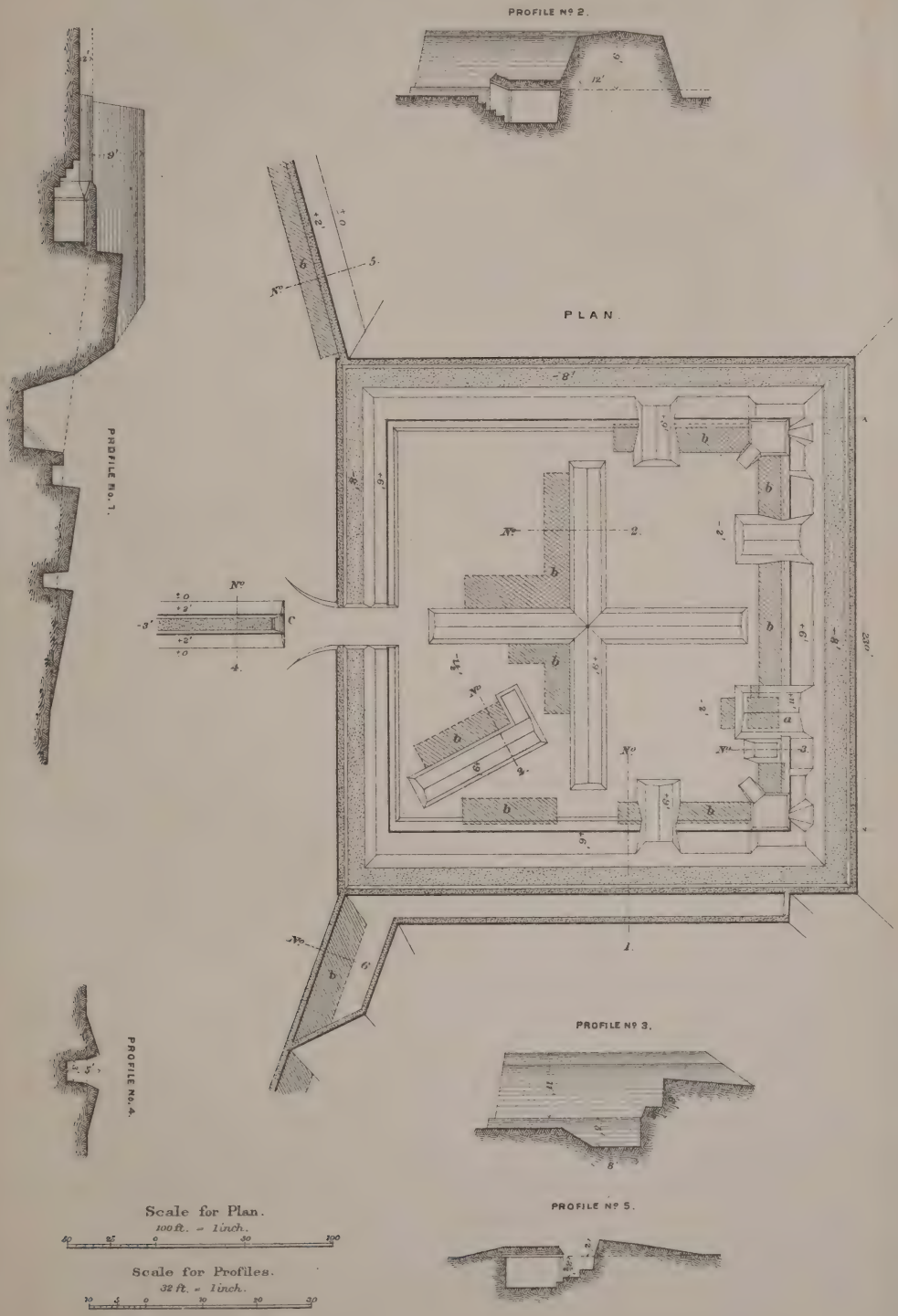
FORTIFICATIONS OF ADRIANOPLE.



REDOUBT No. 1.



J. Bien, lith. N.Y.

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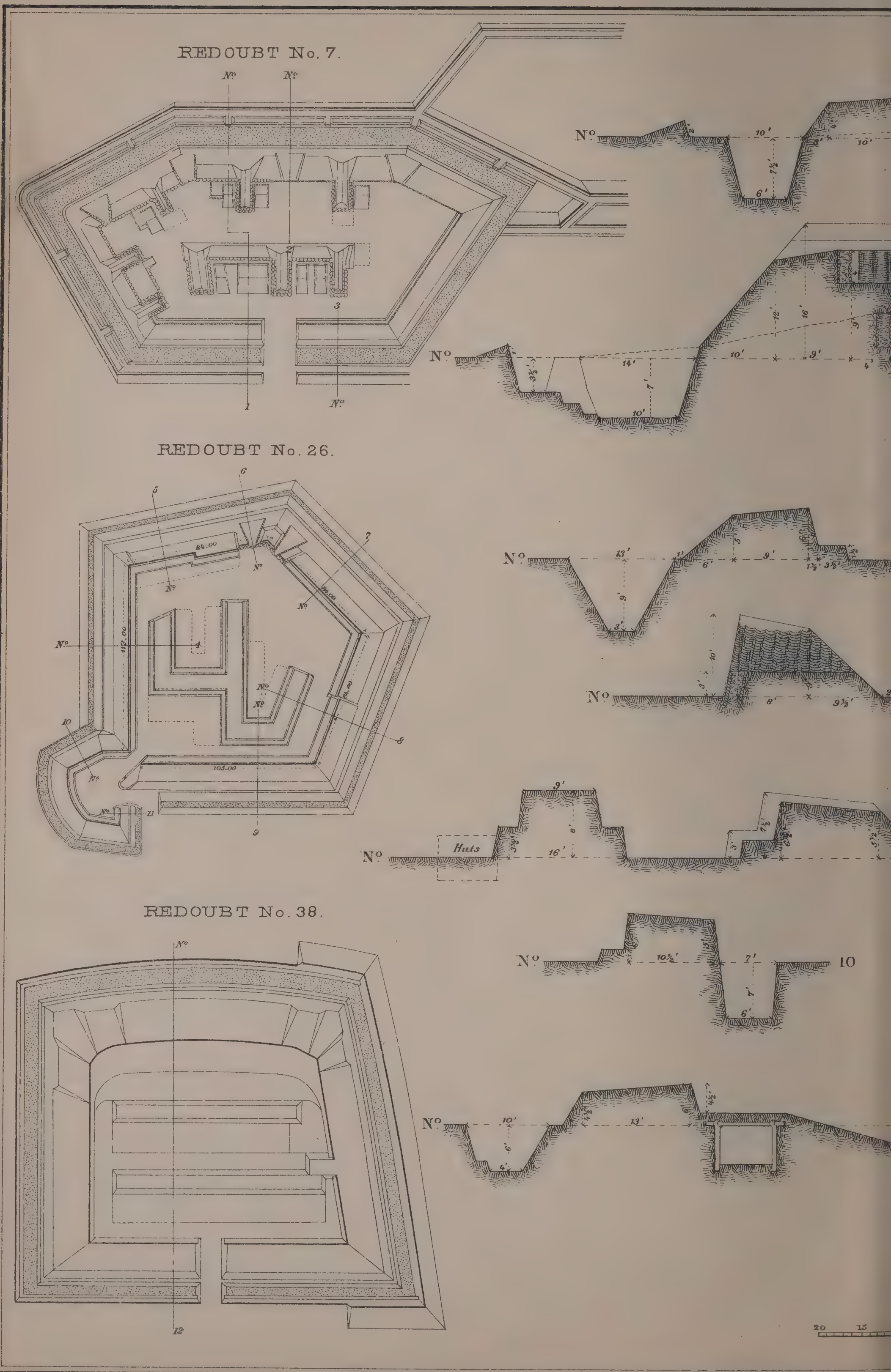
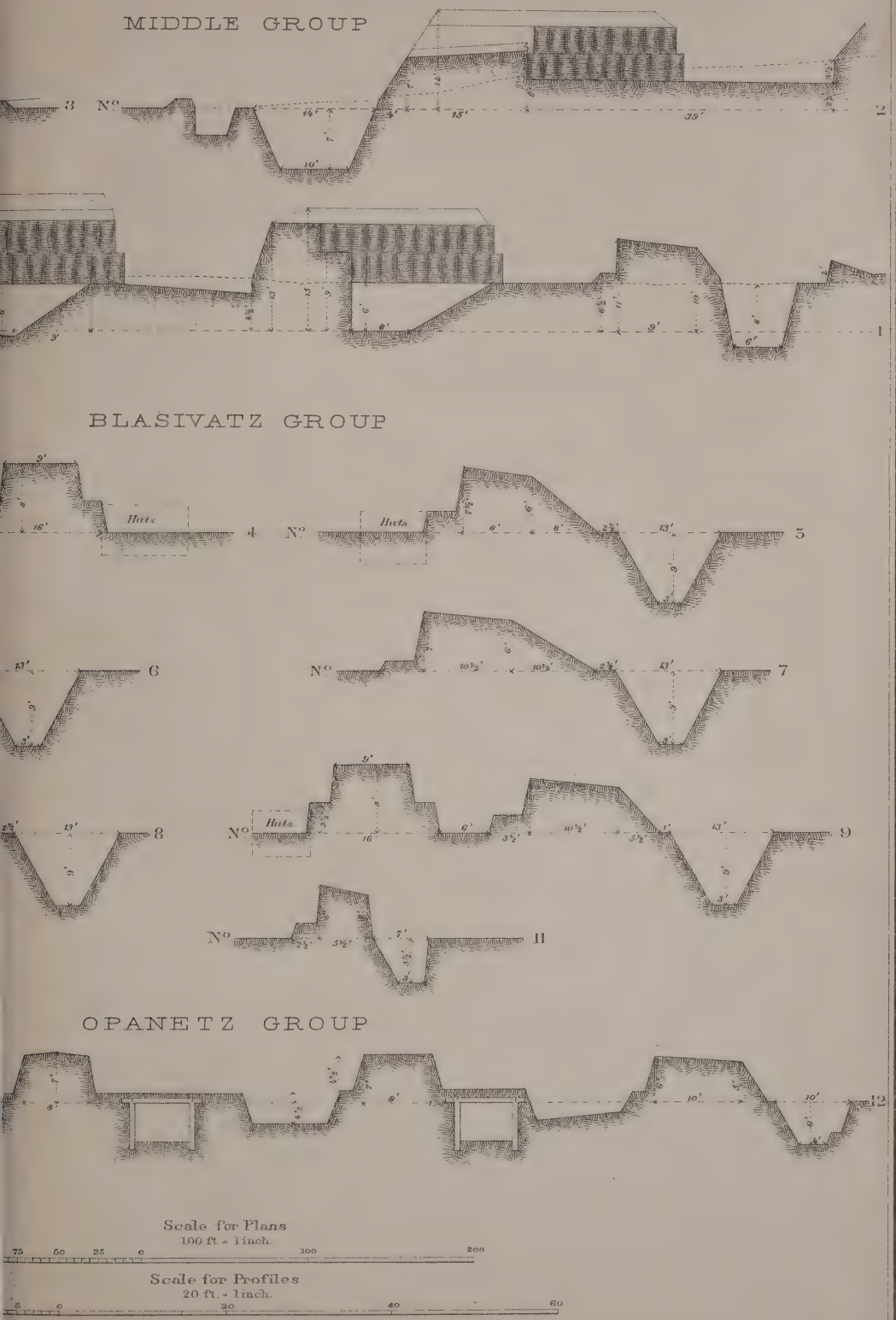
TURKISH FORTIFIC





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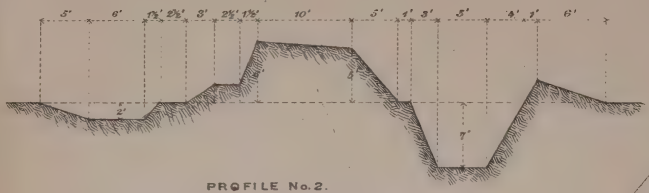

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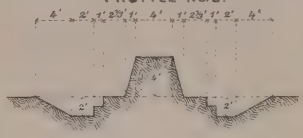

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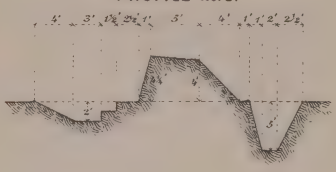
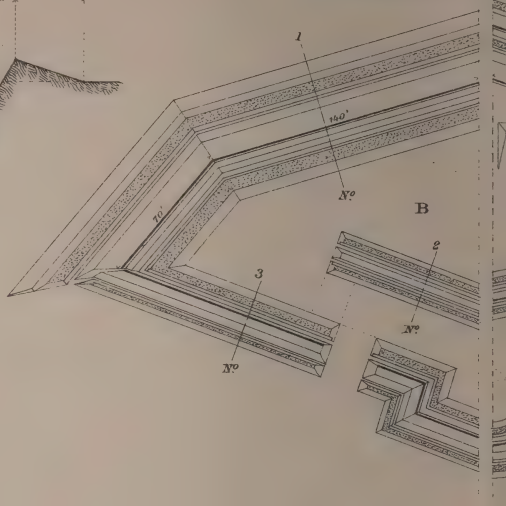


NORMAL FORM



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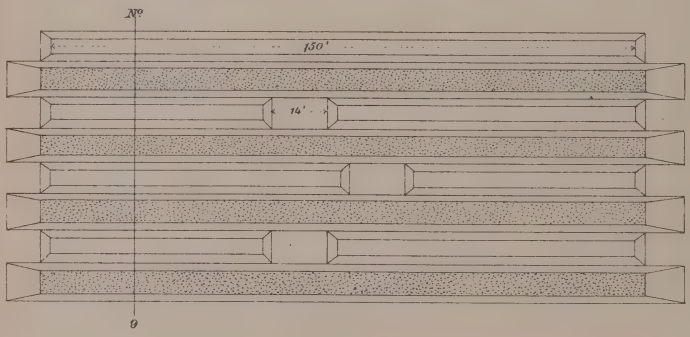

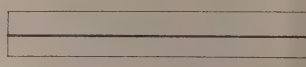

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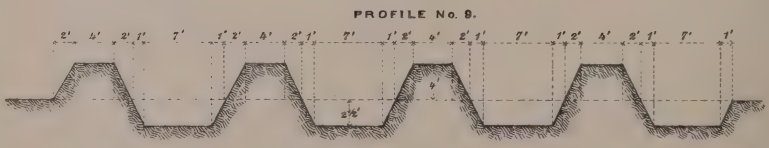

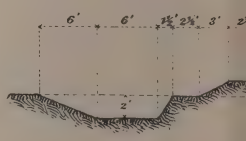

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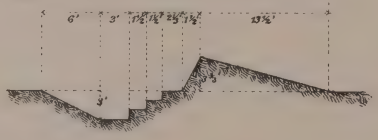
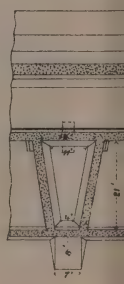
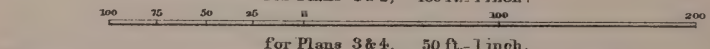


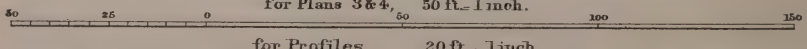


SCALES:

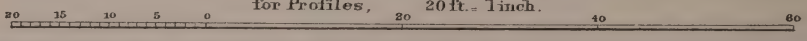
for Plans 1 & 2, 100 ft. = 1 inch.



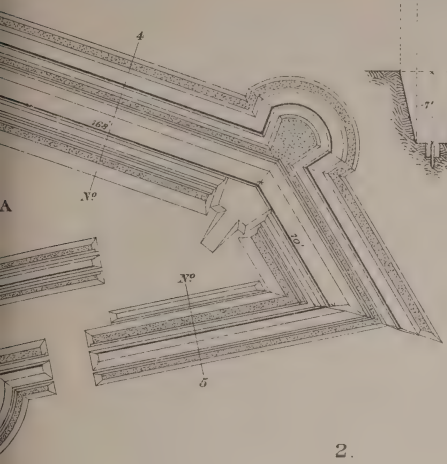
for Plans 3 & 4, 50 ft. = 1 inch.

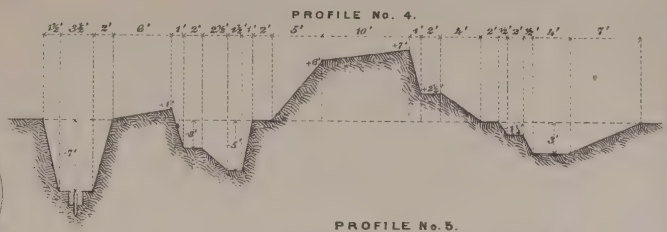


for Profiles, 20 ft. = 1 inch.



REDOUBTS.

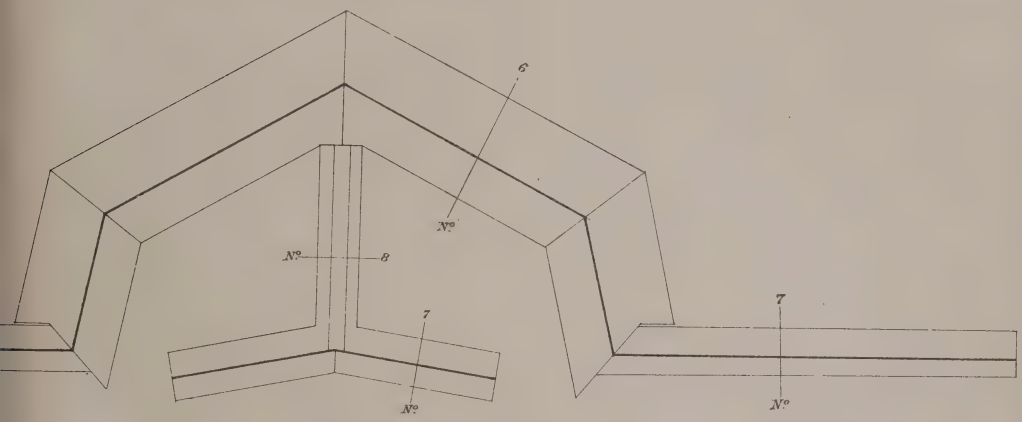


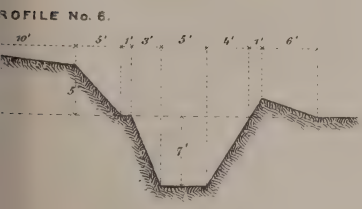


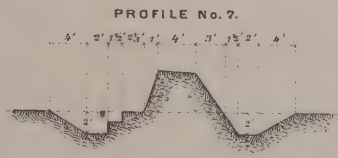
2.

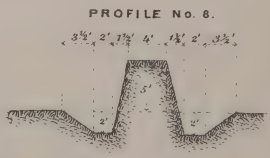
NORMAL FORM OF LUNETTE,

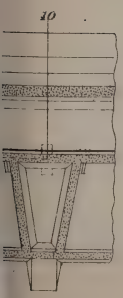
WITH TRAVERSE AND TRENCHES FOR RESERVE.











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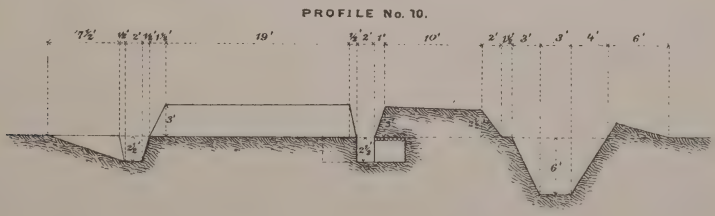
NORMAL FORM OF HORIZONTAL BATTERY.



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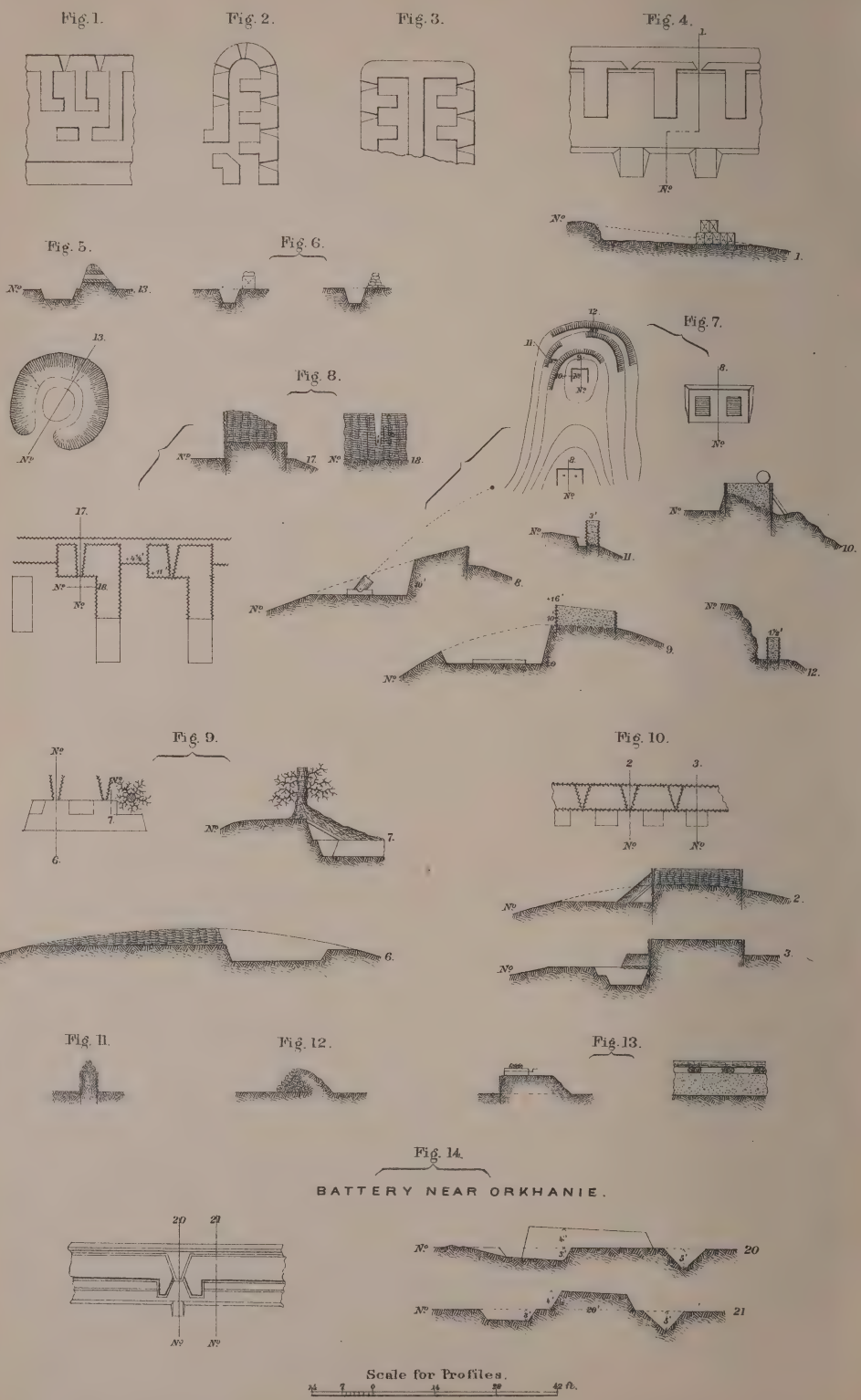

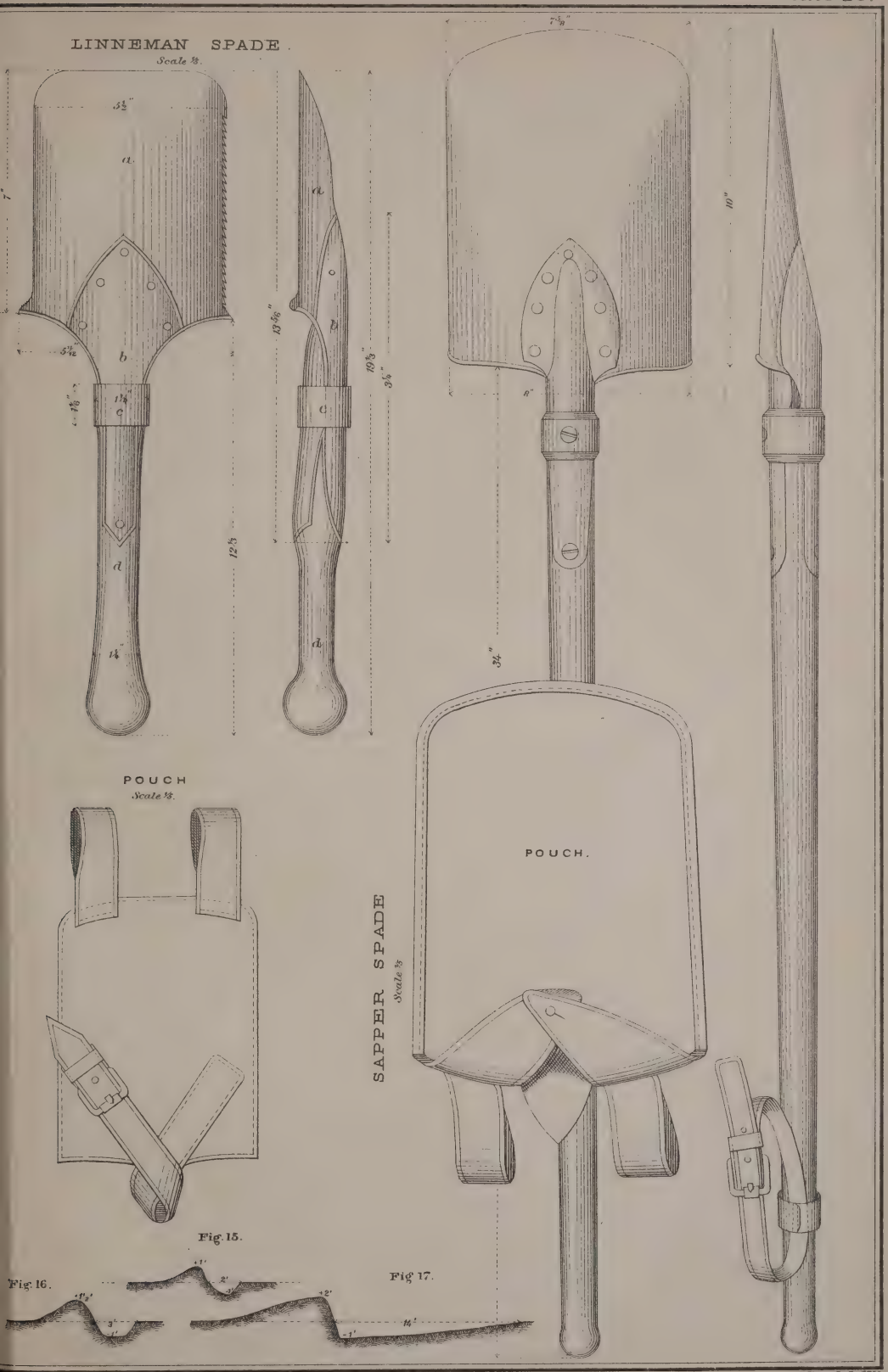

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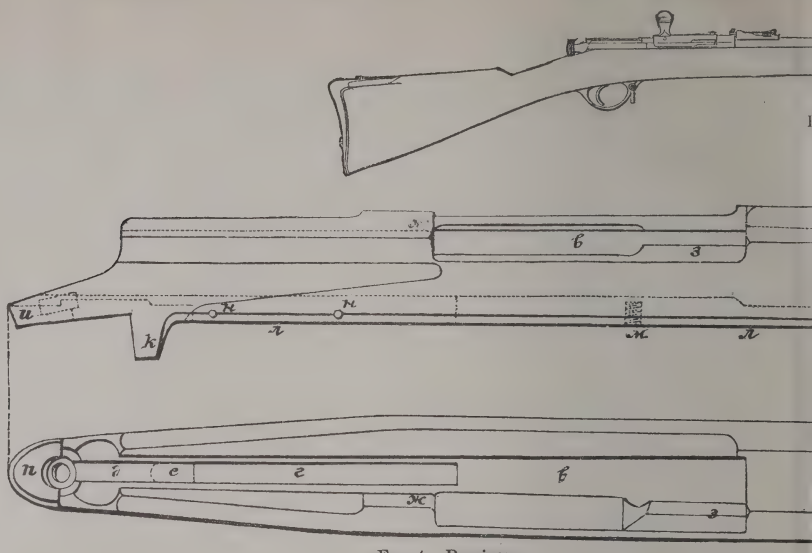


Fig. 4.—Receiver.

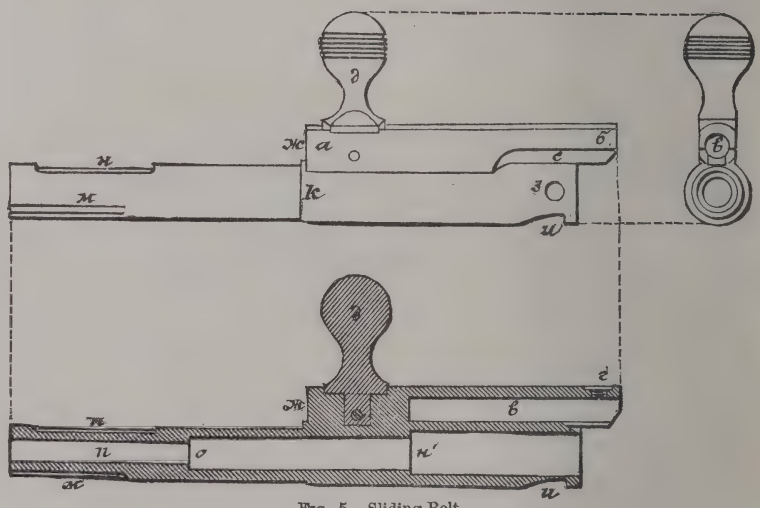


Fig. 5.—Sliding Bolt.

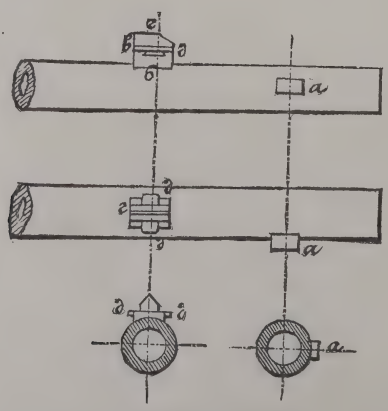


Fig. 14.—Front Sight and Bayonet Stud.

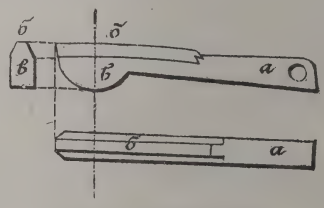


Fig. 11.—Locking Latch.

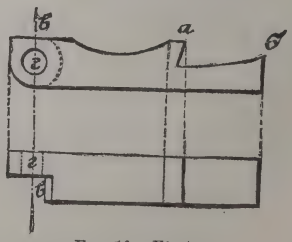
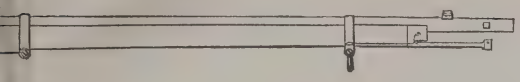


Fig. 10.—Ejector.



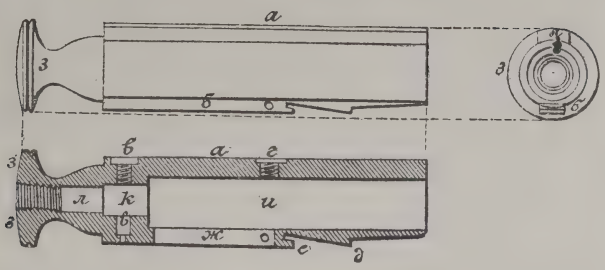
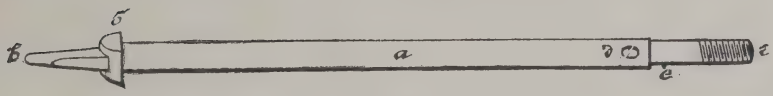


Fig. 6.—Sliding Bolt Tube.



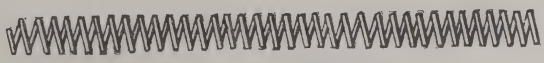


Fig. 7.—Firing Pin and Spring.

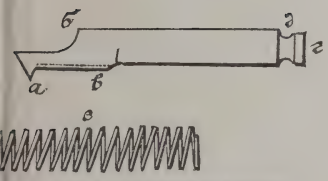


Fig. 9.—Extractor and Spring.

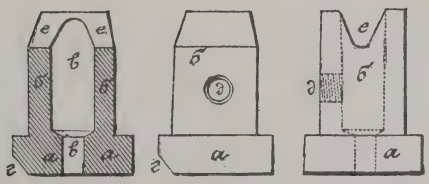


Fig. 8.—Nose Piece.

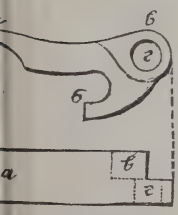


Fig. 12.—Sear.

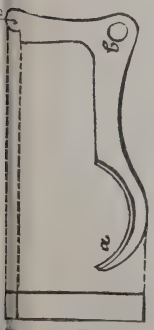


Fig. 13.—Trigger.

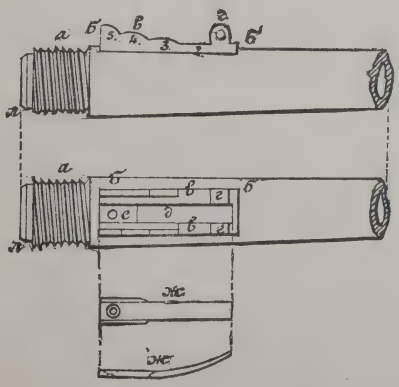


Fig. 15.—Rear Sight Attachment.

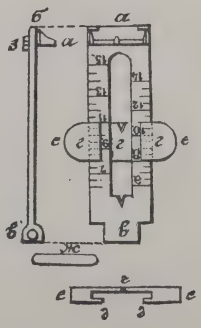


Fig. 16. Rear Sight.

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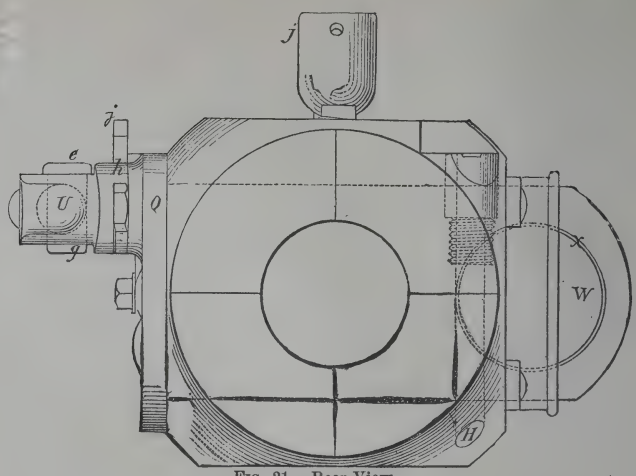


FIG. 31.—Rear View.

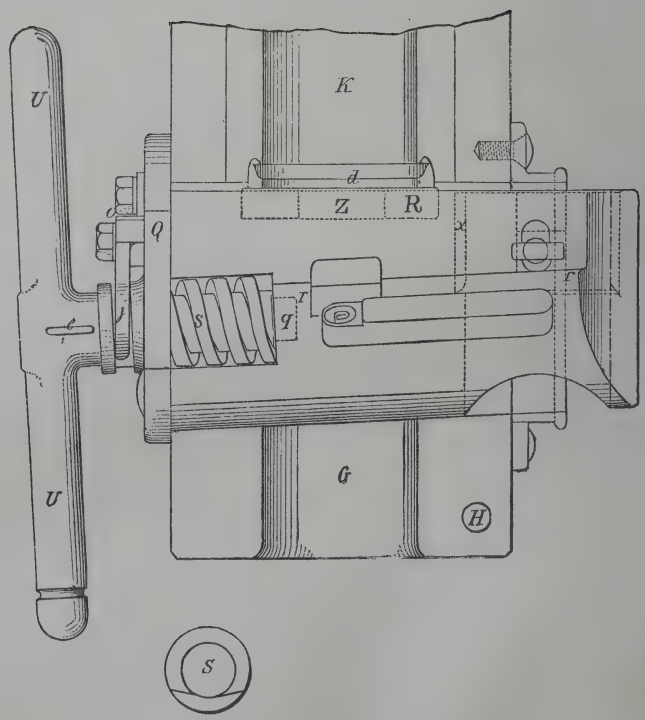


FIG. 34.—Top View of Wedge.

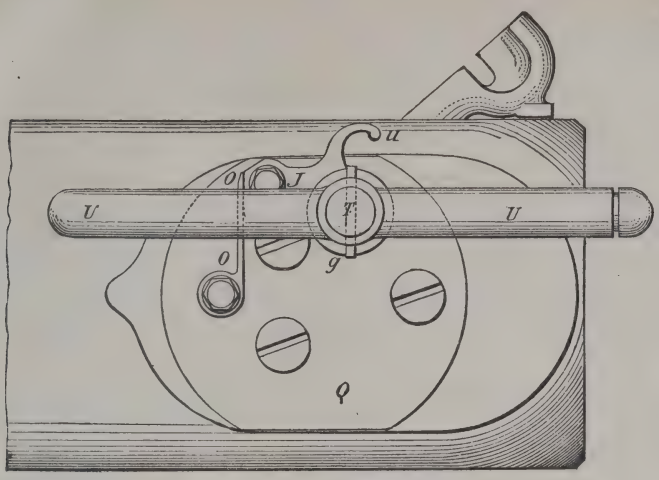


FIG. 32.—View on Left Side of Gun.

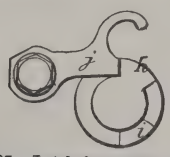
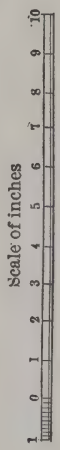


FIG. 37.—Latch for securing Breech.



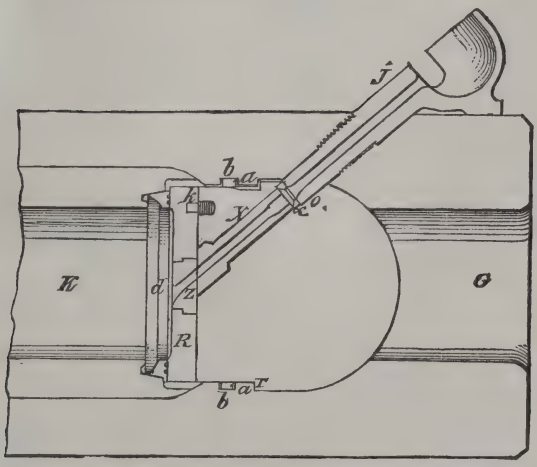
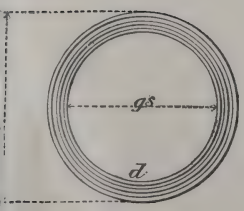


FIG. 33.—Longitudinal Section through Axis of Vent.



G. 35.—Gas-Check.

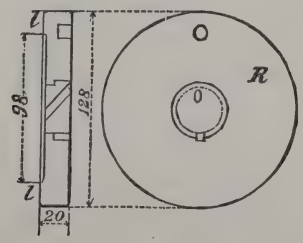


FIG. 36.Gas-Plate.

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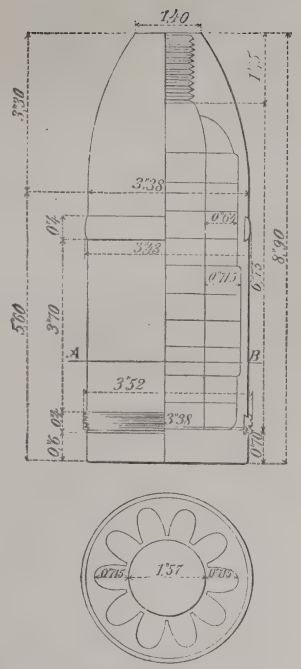

Fig. 40.—Shell: Weight (loaded), 15·12 lbs.; bursting charge, ·45 lb.

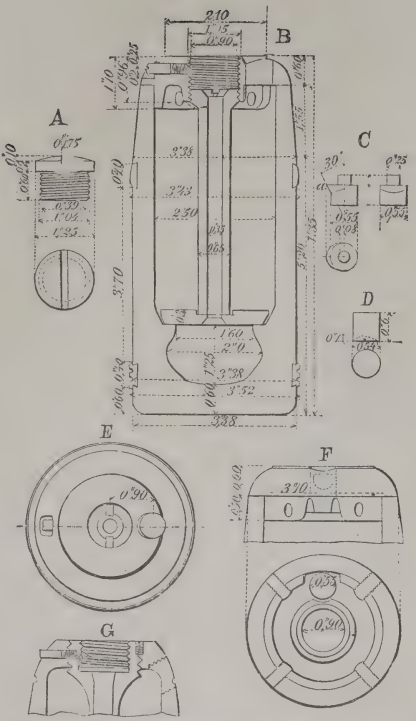

Fig. 41.—Shrapnel: Weight (loaded), 15·12 lbs.; bursting charge, ·15 lb.; number of bullets, 150; diameter of bullets, ·5 inch.

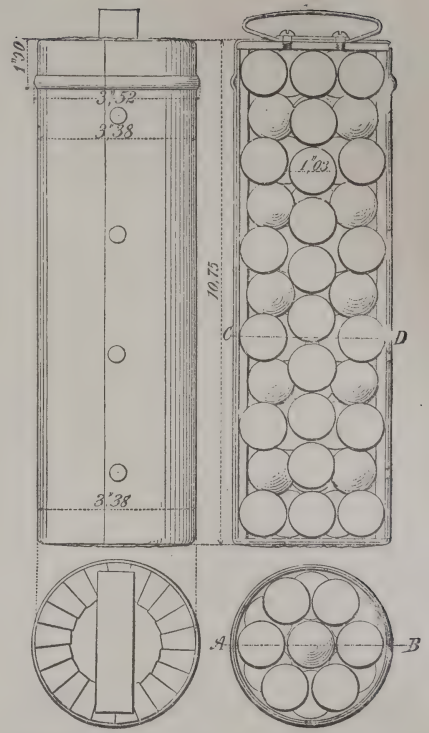

Fig. 42.—Canister: Weight (loaded), 15·61 lbs; number of bullets, 76; diameter of bullet, 1·03 inch.

Scale, $\frac{1}{6}$; dimensions in inches.

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